



## EXTERNAL AND INTERNAL OWNERSHIP CONCENTRATION AND DEBT DECISIONS IN AN EMERGING MARKET: EVIDENCE FROM PAKISTAN

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### ABSTRACT

*This study examines the effect of concentration of ownership both external block ownership and managerial share ownership on capital structure decision of Pakistani non-financial firms. The panel data is used to investigate the relationship between capital structure with external and internal ownership structure and fixed effect model gives a better explanation of the model. The relationship suggested by analysis between external ownership concentration and leverage ratio, patronage the “passive voting hypothesis” that large external shareholders select corporate managers through their voting power by ignoring the interest of the small shareholders. While large insider ownership significantly enhances the voting power and influence the corporate decisions. Which result difficult to control managerial behavior of getting high level of debt in capital structure. The findings of joint model divulged that ownership variables, insider ownership and external block holders have positive and significant association with leverage. Our analysis also finds the relationship between external block holders and leverage fluctuates with the level of insider ownership and don’t support the “curvilinear relationship” among insiders ownership and leverage ratio. Large sized firms with more cash flows issue more debt. The profitable firms having earning volatility and non-debt tax shield and less dividend paying are less likely to choose higher debt which supports that firms follow the Pecking order theory in making financing decisions. The contribution of the present study is to give insight about capital structure and ownership structure to the investors and corporate managers and influence of ownership on corporate debt decisions. The finds of the present study will help both managers and investors in their investment decisions.. This is the first attempt to explore relation between concentration of ownership both internal and*

*external and capital structure in case of Pakistani firms where ownership and financial structures are different relative to those in developed markets.*

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**Keywords:** Managerial ownership, External block ownership, Capital structure, Earning volatility, Growth opportunities, Pakistani non-financial firms.

## 1. INTRODUCTION

The nature of relationship between ownership structure and the capital structure is an emerging issue in the literature of the corporate finance. In particular, ownership structure is an incentive device for reducing the agency costs related with the separation of ownership and management (Barbosa and Helen, 2002). The conflict between managers and owners regarding the functioning of the firm and the impact ownership on financial decisions is well research area for developed markets; however, the issues are not seriously investigated for emerging markets at all. As large share holdings are common characteristics of developing markets (Porta *et al.*, 1999), it is argued that large share-holders' incentive and ability to collect information and to monitor management reduces agency costs (Shleifer and Vishny, 1986) and affects the financial decisions made by the firms.

The agency theory and empirical studies done in this framework have suggested that the managers, who have non diversifiable human capital invested in the firm, have incentives to reduced their non-diversifiable employment risk by ensuring the continued viability of the firm (Amihud and Lev, 1981) and this risk is reduced by decreasing the firms' debt holdings (Friend and Lang, 1988). As managers do not get the entire gain from their profit enhancing activities, rather bear the entire cost of these activities. Managers exert insufficient work, indulge in perquisites and may invest in projects that reduce the value of the firm but enhance their control over the resources (Harris and Raviv, 1990). Jensen and Meckling (1976) advocate the need of monitoring by increased external ownership of the market. Firms have different degree of ownership concentration among corporate insiders and external investors and this distribution of ownership among different groups can impact on managerial opportunism which subsequently has implications for managerial behaviour and financial decisions. Both self-interest hypothesis and managerial approach suggest that capital structure decisions are susceptible by managers adverse incentives (Demsetz, 1983; Shleifer and Vishny, 1986; Agrawal and Mandelker, 1990). It is significantly argued that the dispersion of ownership structure related to the capital structure. In developing countries considerable attention has given to the issue that capital structure decisions are influenced by the ownership structure. But in emerging markets limited studies have looked at the association between capital structure and ownership structure.

The present study attempts to find the relationship between ownership structure and capital structure in agency theoretic framework and adopt the methodology developed by Brailsford *et al.* (2000). The objective is to examine whether external and internal ownership concentration has any role in making financial decisions by the Pakistani firms. The present study, first examines the effect of external block ownership on managers' incentives to reduce their non-diversifiable

employment risks and adjust the corporate debt ratio for the non-financial firms listed at the Karachi stock exchange for the period 2003 to 2009. Second, the study investigates that relation between insider/management ownership and the level of debt ratio to play their role as monitors and to examine convergence of interest takes place first. Latter at higher level of inside ownership convergence of interest remains or it is dominated by enrichment effect. Third, the study incorporates the effects of both external block ownership and managerial share ownership on the corporate financing decision. This study contributes to existing literature in several ways. This is the first attempt to examine the link between ownership structure and capital structure in the context of Pakistani firms which have different ownership patterns and financial structure (Cheema *et al.*, 2003) (Javid and Iqbal, 2009). For more in depth understanding this interaction is investigated for external block holder and inside ownership separately and in combined model. The analysis is carried out in the agency theoretic framework which suggests that an optimal capital structure and ownership structure can minimize agency costs (Jensen and Meckling, 1976; Jensen, 1986)

The present study is organized as follows: The theoretical and empirical literatures are briefly reviewed in Section II. The methodology and data is presented in section III. Section IV explains the empirical results and study is concluded in the last section.

## 2. LITERATURE REVIEW

There is large body of theoretical and empirical literature that investigates the association between ownership structures and the capital structure. In the theoretical literature there are two conflicting hypothesis regarding the role of external ownership on the capital structure decision of firms. The active monitoring hypothesis of Shleifer and Vishny (1986) suggests that external block holders reduce agency conflicts between managers and shareholders because they have significant investments which motivate them to monitor managers and reduce their self-interest behavior. If this hypothesis holds true in describing the role of external block holders, it is expected that leverage may be positively related to the ownership of block holders. Friend and Lang (1988), Brailsford *et al.* (2000) Confirms the assumption for Australian firms that firms with high level of external blocking holdings are probably high leverage ratio. Both theoretical and empirical literature support the hypothesis the agency cost increased with the increase in the external share holdings (Shome and Singh, 1995; Bethel *et al.*, 1998). High level external block holders will monitor and influence the financial decisions of corporate managers, hence the corporate managers are not able manipulate leverage for their own interest. Pound (1988) introduced an alternative hypothesis called "Passive voters hypothesis" disagreeing that large block holders are the passive voters, they outline with the corporate managers against the best interests spread shareholders.

If external block holders behave according to this hypothesis, debt equity ratio may be negatively related to the share ownership of such block holders. McConnell and Servaes (1995) and (Brailsford *et al.*, 2000) findings are supportive to this hypothesis that firms with higher level of external block holdings are less likely to have higher debt ratio. As regards the theoretical literature on inside

ownership, the managerial self-interests hypotheses argues that managers are assumed to be rational, they maximize their utility in corporate policy based on self-serving desires called. If the managers of the firm also have an ownership stake in their firm, they are more likely to maximize shareholders wealth. In addition, large external shareholders are likely to influence corporation policies, because they own sufficient stock to guarantee some degree of control over management (Shleifer and Vishny, 1986). Agency theory states that managers of firms are likely to engage in non-value maximizing behaviour and the value of the firm would be decreased, however, if manager's personal wealth is linked to the price of the firm's common equity, these agency costs could be reduced Jensen and Meckling (1976). Thus, managerial ownership of equity (insider holding) could serve as an agency-cost reducing mechanism, increasing the value of the firm. Therefore, the structure of equity ownership has important effect on the managerial incentives and the firm value (Jensen and Meckling, 1976; Fama and Jensen, 1983; Shleifer and Vishny, 1986). The corporate managers derive a large proportion of their wealth from the investment in human capital specific to the firm which is non-diversifiable (Amihud and Lev, 1981; Crutchley and Hansen, 1989). Non-diversified employment risk can also be reduced by decreasing the firm's debt holding as debt increases bankruptcy risks of a firm or financial distress may result the loss employment, and potentially lower earning capacity of managers, it is argued that self-interested managers have incentives to reduce corporate debt to a level which is less than optimal (Friend and Lang, 1988).

The corporate governance literature considers debt policy of firms as an internal control mechanism which can reduce the agency costs of free cash flows Jensen (1986). Specifically, the obligations associated with debt reduce management's discretionary control over the firm's free cash flow and their incentives to engage in non-optimal activities (Grossman and Hart, 1980). However as Myers (1977) show that debt can also have undesirable effects such as inducing managers to forego positive net present value projects. Similarly, managerial share ownership can be reduced managerial incentives to consume perquisites, expropriate shareholder's wealth and to go engage in other non-maximizing behavior and thereby helps in aligning between management and shareholders. This is known as the convergence of interests' hypothesis presented by Jensen (1986). Grossman and Hart (1980). Opposed to the convergence Hypothesis Fama and Jensen (1983) advocated an inverse relationship between agency cost and managerial ownership. They argued that without reducing managerial incentives, managerial ownership established a management group to protect the manager's incentives and opportunities. This managerial opportunism leads to "entrenchment hypotheses". Curvilinear relationship between managerial ownership concentration and firm value is the product of convergence of interests and entrenchment hypotheses.

Studies such as Morck *et al.* (1988), McConnell and Servaes (1990) and McConnell and Servaes (1995) find a non-linear relationship between managerial share ownership and firm value. These studies recommend that at low levels of managerial share ownership, managerial share ownership increases firm value due to the convergence of interests' effect. However, when the level of management ownership is high, entrenchment sets in, leading to higher agency conflicts and a consequent decline in the value of the firm. Morck *et al.* (1988) find a positive relation between

management ownership and firm value in the 0% to 5% ownership range and beyond the 25% ownership range for US firms. [McConnell and Servaes \(1990\)](#) find a positive relation between managerial share ownership and firm value but in the management ownership range of 0% to 40-50%.<sup>6</sup> [Short and Keasy \(1999\)](#) provide support for the curvilinear effects but find that management in the United Kingdom become entrenched at higher levels of ownership than their United States counterparts. The difference in results may be explained by size effect ([Kole, 1995](#)) and difference in governance mechanisms in the different countries ([Short and Keasy, 1999](#)). Despite the possible connection between managerial share ownership and external block ownership in mitigating agency conflicts, earlier studies have generally only examined the effect of either managerial share ownership or external block ownership on agency conflicts (and firm value) separately.

The studies present association between managerial share ownership and firm value, instead the irrelevance theory of [Miller and Modigliani \(1967\)](#) is due to the existence of market imperfections suggests a relation between capital structure and firm's value. [McConnell and Servaes \(1995\)](#) find that the firms with high growth opportunities are negatively correlated with leverage arguing that a relation exists between managerial share ownership and capital structure.

[Berger et al. \(1997\)](#) study the relationship between CEO compensation and firms leverage levels, and evident that leverage finance is avoided by the entrenched managers. Hence the corporate financing decisions are influenced by the level of shares held by the corporate managers. [Johnson \(1997\)](#) empirically prove that leverage decisions is linked with agency cost and reported that monitoring effects the leverage decisions and also the choice of public and private debt sources. [Friend and Lang \(1988\)](#) test the effect of non-managerial block holders on the leverage and find that the presence of such shareholdings increases the debt level. As their analysis, the level of managerial share ownership doesn't play a role. Their analysis makes no predictions as to whether the relationship between external block ownership and the debt ratio varies with the level of managerial share ownership.

The high level of managerial ownership reduced the monitoring effect of the block holders due the entrenchment hypothesis. Hence, the control of external block holders on the managerial opportunism considerably reduced and they have lost the ability to prevent the self-interested manager's form indulging non-maximizing behavior. As a result, block holders and managers work in opposite directions at high level of insider ownership concentration. No study has attempted to investigate the relationship between external block ownership and managerial share ownership on debt levels simultaneously.

### 3. METHODOLOGY AND DATA

The present study investigates the relationship between the ownership structure and capital structure for sixty non-financial firms listed on Karachi Stock Exchange for the period 2003-2009. To probe the relation between leverage ratio and block holder (both internal and external), [Brailsford et al. \(2000\)](#) methodology is followed. Panel regression technique is used for estimation.

Corporate debt act as internal control mechanism on manager's decisions and it is assumed that corporate debt ratios are the controlling function of the external block holder's ownership.

The relationship between firm's debt equity ratio and external block holding is estimated by the model (1) given below following Brailsford *et al.* (2000):

$$DE_{it} = \alpha_0 + \alpha_1 EB_{it} + \alpha_2 SIZE_{it} + \alpha_3 VOL_{it} + \alpha_4 GROWTH_{it} + \alpha_5 PROF_{it} + \alpha_6 FCF_{it} + \alpha_7 NTD_{it} + \alpha_8 DIV + \varepsilon_{it} \quad (1)$$

Where  $DE_{it}$  is natural log transformation of debt to equity ratio,  $EB_{it}$  is the external block holding defined as the percentage shares held by the top five large shareholders. To deal with problem that firm specific factors can jointly affect the capital structure and concentration of external block ownership a set of control variables is included.

To capture the risk two variables are used firm size  $SIZE_{it}$  and earning volatility  $VOL_{it}$ . The firm size calculated as natural logarithm of total assets and this variable is expected to have a positive coefficient as large more diversified firms are likely to have a lower a lower bankruptcy and can sustain a higher level of debt (Scott and Martin, 1975; Ferri and Jones, 1979; Agrawal and Nagarajan, 1990). The volatility is defined as the annual percentage change in operating income before interest, interest and depreciation (Bradley *et al.*, 1984; Brailsford *et al.*, 2000) and previous five years data is used to estimate the volatility.

The agency conflict is controlled by three variables: growth opportunities of firm  $GROWTH_{it}$  free cash flow  $FCF_{it}$  and profit  $PROF_{it}$ . The growth opportunities are measured as annual percentage change in sales and considered as a good substitute for the agency costs of debt. Brailsford *et al.* (2000) suggest that there may be tendency to invest sub-optimally to expropriate wealth from a firm's debt holders is likely to be higher for firms in growing industries. The growth opportunities identify that firm is earning profits and there may be sufficient internal funds available for investment. Brailsford *et al.* (2000). Pecking order theory advocates that corporations will prefer on their internal sources of finance rather than leverage and suggested inverse relation between growth and leverage ratio (Majluf and Myers, 1984).

Free cash flow is used as proxy to measure the agency cost. Free cash flows are the excessive cash flow and measured as operating income. Corporate managers engage the excessive free cash flows in non-wealth maximize activities instead of distributing the excessive cash to the shareholders called the "free cash flows hypothesis". A negative relationship is suggested between high free cash flows and leverage ratio (Brailsford *et al.*, 2000).

The firm profits are defined as operating income before interest and taxes scaled by total assets. More profitable firms will demand less debt because internal funds are available for finance is postulated by pecking order theory (Majluf and Myers, 1984). The profitable firms have more earnings available as internal sources; these firms tend to build their equity relative to their debt. The empirical studies have found a negative relationship between profitability and debt equity ratio (Friend and Lang, 1988; Brailsford *et al.*, 2000).

The non-debt tax shield is included in the model and it is expected that the firms with higher non-debt tax shields receive lower tax benefits from issuing debt and therefore will use less debt. This is known as non-debt tax shields argument (DeAngelo and Masulis, 1980) and implies a negative relation between non-debt tax shield and the debt equity ratio. Another important corporate decision is dividend distribution made by managers and it is assumed that firms distribute large portion of earnings to shareholders rely on more debt.

Theories base on the “convergence hypothesis” and “entrenchment hypothesis “ supporting the managerial ownership, that at low levels of insider ownership the interest of both managers and owners are leading to enhance the leverage level. However in case, where managers have already clutches a significant portion of shares, and a slight increase of this portion will lead to “entrenchment hypothesis” resulting to enhance managerial opportunism and reduced debt levels. Hence, it is expected a curvilinear relationship between insider ownership and leverage ratio (debt to equity). This curvilinear relationship is due to the effects of managerial opportunism first debt show declined trend and then increases with the increases of managerial ownership.

To test hypothesis that at low levels of inside ownership, inside ownership is positively related to a firm’s debt equity ratio, and at high levels of inside ownership, inside share ownership is negatively related to a firm’s debt equity ratio, the following model suggested by Brailsford *et al.* (2000) is estimated:

$$DE_{it} = \beta_0 + \beta_1 IB_{it} + \beta_2 IB_{it}^8 + \beta_3 SIZE_{it} + \beta_4 VOL_{it} + \beta_5 GROWTH_{it} + \beta_6 PROF_{it} + \alpha_7 FCF_{it} + \beta_8 NTD + \varepsilon_{it} \quad (2)$$

Where all the variables remain the same inside ownership  $IB_{it}$  is measured as percentage of ordinary shares owned by all executive and non-executive directors.

In the third stage combined effect of internal and external block holding on capital structure is analyzed. Agency cost theory suggest that at low level of inside ownership, managers have limited voting power and influence, while external block holders have the ability to monitor and restrict managerial opportunistic behavior, therefore mitigating agency conflicts. Therefore, both external block ownership and inside ownership have a positive effect on the managerial incentive problems. In particular, both factors are expected to be able to reduce managerial opportunistic behaviors, such that external block ownership has a complementary effect at low levels of inside share ownership. This leads to test the hypothesis that at low levels of inside share ownership, the level of external block ownership is positively related to the firm’s debt equity ratio.

If the entrenchment effect of inside ownership exceeds the monitoring effect of external block ownership, the significance of the relationship between external block ownership and debt equity ratio will be reduced. At the extreme, if the entrenchment effect dominates the monitoring effect, the relationship between external block ownership and debt equity ratio will be ineffective. Therefore, it is expected that the relationship between external block ownership and debt equity ratio at high levels of inside ownership will not be as significant as compared to low levels of director ownership. This



motivates to investigate the association between external block ownership and debt equity ratio by two related hypothesis: (1) the external block ownership and debt equity ratios are positively related when there is low inside ownership, (2) at high levels of inside ownership, the relationship between block holding and the firm's debt equity ratio is less significant. To test these two hypotheses a dummy variable D is introduced to take account of different levels of inside ownership, D takes the value of 1 if the level of inside share ownership is more than 50% and zero otherwise. The model becomes:

$$DE_{it} = \gamma_0 + \gamma_1 IB_{it} + \gamma_2 IB_{it}^2 + \gamma_3 EB_{it} + \gamma_4 (D * EB)_{it} + \gamma_5 SIZE_i + \gamma_6 VOL_{it} + \gamma_7 GROWTH_{it} + \gamma_8 PROF + \gamma_9 FCF_{it} + \gamma_{10} NTD_{it} + DIV_{it} + \varepsilon_{it} \quad (3)$$

Where all variables are same as described in model (1) and model(2)

#### 4. DATA AND SAMPLE

The sample consists of sixty non-financial firms included in KSE 100 index for the period 2003- 2009. The data has been taken from Balance Sheet Analysis of Joint Stock Companies listed on the KSE (2003-2009) State Bank of Pakistan annual reports of non-financial firms listed on Karachi Stock Exchange (KSE) The sample is drawn from the listed non-financial firms of KSE the and study covers 60 non-financial firms which are 80 percent of the market capitalization of KSE in 2007. The annual reports of firms have been down loaded through websites of the respective firms. The study includes the non-financial firms because there is a difference between the capital structure of financial and non-financial firms and the combine analysis of both the categories may not present a true picture of the phenomena.

#### 5. EMPIRICAL RESULTS

In this section, the empirical analysis of the relationship between ownership and capital structure is presented and discussed. The descriptive analysis is presented in Table 1. In Table 2 correlations results are reported. The correlation analyses find a negative correlation coefficient between leverage ratios (debt to equity) and external block holders. The negative correlation coefficient is also reported between, earning volatility, profitability, free cash flows and firm's debt to equity ratio. However, debt to equity ratio is positively correlated with managerial ownership, growth, tax shield and firms size.



**Table-1.** Summary Statistics

	Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
DE	4.74	7.70	0.92	1.12	-0.45	3.58
DIV	7.89	41.70	0.00	7.97	1.02	3.92
EBO	71.70	99.82	3.02	26.29	-1.00	2.81
IB	18.49	75.27	0.00	21.29	0.90	2.50
NTDS	4.26	10.78	0.00	1.90	0.65	4.07
SIZE	7.24	11.92	2.33	2.02	0.05	2.58
VOL	5.30	11.09	-2.30	2.26	0.09	2.88
FCF	5.19	10.58	0.10	2.22	-0.13	2.59
GROWTH	0.17	1.37	0.00	0.21	2.34	9.55
PROF	13.68	55.38	0.13	10.69	0.95	3.35

**Table-2.** Correlation Matrix

	De	Div	Ebo	Ib	Ntds	Size	Voll	Fcfl	Growth	Prfo
De	1									
Div	0.07	1.00								
Ebo	-0.02	0.11	1.00							
Ib	0.12	-0.10	-0.85	1.00						
Ntds	0.05	-0.05	0.00	0.02	1.00					
Size	0.02	0.13	0.41	-0.35	-0.06	1.00				
Vol	-0.06	-0.01	-0.08	0.02	-0.01	-0.02	1.00			
Fcf	-0.03	-0.04	-0.05	0.00	-0.06	0.00	0.91	1.00		
Growth	0.13	0.08	0.07	-0.04	-0.16	0.03	0.00	0.02	1.00	
Prfo	-0.32	0.04	0.19	-0.21	0.15	0.19	0.10	0.12	-0.03	1

The regression results to examine the impact of external block ownership on debt equity ratio (model 1) are reported in the Table 3. Regressions results presented a negative regression coefficient between debt to equity ratio and external block holders, supporting the active monitoring hypothesis. Active monitoring hypothesis suggest that large shareholders actively involved in monitoring the management activities due to their significant investment but does not hold true for Pakistani listed firms. Our findings are in line with passive voting hypothesis of Pound (1988). According to passive voting hypothesis that large shareholders select the management by infringing the interest of small shareholders. Our finding is contradicted with findings of developed markets, where higher external block holders firms have high leverage ratio. Brailsford *et al.* (2000) study for Australian equity market and reported a positive impact of block holders on leverage ratio. However, Saravanan (2003) finding confirm the negative relationship in case of India which is developing market.

The results show that large firms have high debt equity ratio supporting the size argument of Scott and Martin (1975), Ferri and Jones (1979). The empirical findings of Agrawal and Nagarajan (1990) and Brailsford *et al.* (2000) also confirm that firm size has positive effect on debt equity ratio. The earning volatility is negative and marginally significant effect on debt ratio suggests that firms with higher earnings volatility have higher bankruptcy risks and lower access to debt.

Brailsford *et al.* (2000) also come up with the same findings. The negative relation of firms' profitability with debt ratio suggests that more profitable firms rely less on retained sources for financing rather relying on debt. This result supports that Pakistani listed firms follow the pecking order theory of Myers (1977), Majluf and Myers (1984) which describe that profitable firms will demand less debt because internal funds are available for financing projects. In Pakistan about 59% of the firms are family firms and financial market is not well developed, therefore, these firms rely on internal sources for investment. Titman and Wessels (1988), Friend and Lang (1988), Allen (1993) and Wald (1995). Brailsford *et al.* (2000) also confirm that more profitable firms have more debt. The growth opportunities have not a significant relation with debt equity ratio that means the firms with more potential in future would not matter in financing decisions in case of Pakistani firms. Bradley *et al.* (1984) and Titman and Wessels (1988) obtain a significant negative relationship between growth opportunities and firms' debt equity ratio. The positive free cash flow indicates that firms with more cash flow more likely to choose higher debt equity ratio and this result is consistent with Jensen (1986) free cash flow hypothesis predicting that the firm with more cash flows are likely to have higher leverage. The results also indicate that managers having excessive cash flows invest less optimally and do not pay dividend to shareholders as shown by negative relation between dividend and leverage. The non-debt tax shield has a positive and significant impact on the debt to equity ratio.

In the second stage of the analysis the study investigates whether the expected relationship between inside ownership and the debt equity ratio is curvilinear or not. Model 2 results are presented in Table 3. The results of model 2 reported a significant and positive regression coefficient between managerial ownership and debt to equity ratio. But when we take the square of managerial ownership the regression coefficient becomes negative and insignificant. This suggests that when insider ownership (managerial ownership) is low, the interests of shareholders and management are aligned. However, increase of insider ownership will signify the voting power and influence of the managers, as a result managers have less incentive to reduce the debt level and acquire more debt. But the results for Pakistani firms are contrary and we find no evidence of curvilinear relationship. Hence the entrenchment effect doesn't exist in Pakistani firms. Same results are reported for Indian firms by Saravanan (2003). The results of the control variables are the same as of first model.

The separate analysis of the effect of concentration of ownership on debt equity ratio reveals that external block holding ownership has insignificant while inside ownership has positive and significant impact on the corporate financing decisions in case of Pakistani firms. The combined effect of both external and inside share ownership is presented in the results of model 3 in Table 3. The results of the joint model support the external and internal share ownership bridge together and both positively and significantly influence debt equity ratio. The results show that the association between external block ownership and debt equity ratio at high level of inside ownership differs from that at low levels of inside ownership. The relationship is positive with debt equity ratio suggesting that at low level of inside ownership, larger external shareholders have more incentive

to monitor management. This relationship turns out to be insignificant at high level of inside ownership implying that positive monitoring effect of external block holders is neutralized by negative effect of high inside ownership. Therefore, the results support that the relationship between external block ownership and debt equity ratio at low levels of inside ownership is different from that at high levels due to the interaction between managerial share ownership and external block ownership in case of Pakistani firms. The results of the joint model do not confirm the curvilinear relationship between inside ownership and debt equity ratio. The results of control variables are same in model 3 as in model 1 and 2.

**Table-3.** Evidence on Relationship between Ownership and Capital Structure

	Model I	Model II	Model II
EB	-0.03* (-3.97)		-0.04** (-1.97)
D*EBO			0.01 (0.76)
IB		0.22* (2.18)	0.20** (1.88)
IB <sup>2</sup>		-0.04 (-1.66)	-0.01 (-0.65)
SIZE	0.27* (2.34)	0.22** (1.84)	0.25* (2.10)
VOL	-0.05*** (-1.76)	-0.16* (-2.07)	-0.05** (-1.80)
PROF	-0.52* (-2.30)	-0.03* (-4.81)	-0.59* (-2.56)
GROWTH	-0.07 (-0.95)	-0.19* (0.58)	-0.06 (-0.80)
NDTS	-0.14* (-2.02)	-0.07* (-2.53)	-0.13* (-1.98)
FCF	0.67* (5.59)	0.40** (2.13)	0.68* (-5.78)
DIV	-0.05** (-1.91)	-0.03 (-1.24)	-0.05** (-1.97)
C	3.50* (3.16)	1.27 (1.05)	2.28 (1.95)
Hausman (pvalue)	25.94 (0.00)	16.78 (0.05)	21.00 (0.03)
R <sup>2</sup>	0.28	0.29	0.34

**Note:** The results of model 1, 2 and 3 are reported in column 1, 2 and 3 respectively. The fixed effect model is estimated. The values in the parenthesis below the coefficient are t-values. The \* indicates that significance at 1%, \*\* indicates significance at 5% and \*\*\* indicates significance at 10%

## 6. CONCLUSION

The present study using the agency frame work test the hypotheses which link the relationship between the capital structure and ownership pattern for non-financial firms for the period 2003 to 2009 in the context of the Pakistan. The result of separate analysis reveal that the external block ownership has insignificant effect on debt equity ratio that supports the passive voting hypothesis of Pound (1988). This result suggests that larger shareholders vote with management without

taking consideration of interest of small shareholders. While inside ownership has positive and significant impact on the corporate financing decisions in case of Pakistani firms, however, the relationship is not curvilinear. This result implies that that more inside ownership means more voting power and influence and managers adjust debt equity ratios to their own self-interests. Therefore, manager's incentives scarify with the low level of debt and resulting high level of debt to equity ratio. The joint effect of both block holders and insider ownership on debt to equity ratio is positive and significant. The positive relationship between ownership variables and debt to equity ratio advocates that low level of managerial ownership and large block holders have more incentive to monitor management. This relationship turns out to be insignificant at high level of inside ownership implying that positive monitoring effect of external block holders is neutralized by negative effect of high inside ownership. Therefore, the results support that the relationship between external block ownership and debt equity ratio at low levels of inside ownership is different from that at high levels due to the interaction between managerial share ownership and external block ownership in case of Pakistani firms. The results of the joint model again do not support the theory of curvilinear relationship between the inside ownership in the perspective of Pakistan. The results of control variables are almost same in all three models. The results reveal that firms with higher earnings volatility have higher bankruptcy risks and lower access to debt. The more profitable firm rely less on retained sources for financing rather relying on debt supports that Pakistani listed firm follow the pecking order theory of [Majluf and Myers \(1984\)](#). The growth opportunities have not a significant relation with debt equity ratio that means the firms with more potential in future do not matter in leverage decisions for Pakistani firms. Likewise, the firms with more cash flow less likely to choose higher debt the positive coefficient between free cash flows and debt equity ratio indicate that firms having high cash flows also have high external financing (debt to equity ratio). This finding is consistent with [Jensen \(1986\)](#) free cash flow hypothesis that high leveraged firms have more cash flows. The study also found a negative regression coefficient between dividend and leverage, advocates that more cash flows firms don't take investments confidently and avoid paying dividends to shareholders.

This study has a significant contribution concerning to the leverage decisions in case of Pakistani firms. There is link between the ownership patters and capital structure which implies the financial efficiency of firms depends on the decisions regarding the issues of equity. managers and investors while making investment decisions need to consider the financial and ownership structure.

## REFERENCES

- Agrawal, A. and G. Mandelker, 1990. Large shareholders and the monitoring of managers: The case of antitakeover charter amendments. *Journal of Financial and Quantitative Analysis*, 25(2): 143 - 161.

- Agrawal, A. and N. Nagarajan, 1990. Corporate capital structure, agency costs and ownership control: The case of all-equity firms. *Journal of Finance*, 45(4): 1325-1331.
- Allen, D., 1993. The pecking order hypothesis: Australian evidence. *Applied Financial Economics*, 3(2): 101-112.
- Amihud, Y. and B. Lev, 1981. Risk reduction as a managerial motive for conglomerate mergers. *The Bell Journal of Economics*, 12(2): 605-617.
- Barbosa, N. and L. Helen, 2002. On the determinants of multinationals' ownership preferences: Evidence from Greece and Portugal. *International Journal of Industrial Economics*, 20(4): 493-515.
- Berger, P., E. Ofek and D. Yermack, 1997. Managerial entrenchment and capital structure decisions. *The Journal of Finance*, 52(4): 1411-1438.
- Bethel, J.E., J.P. Liebeskind and T. Opler, 1998. Block share purchase and corporate performance. *The Journal of Finance*, 53(2): 605-634.
- Bradley, M., G.A. Jarrell and E. Kim, 1984. On the existence of an optimal capital structure: Theory and evidence. *The Journal of Finance*, 39(3): 857-878.
- Brailsford, J., Timothy, R. Oliver, Barry and L. Pua, Sndara, 2000. Theory and evidence on the relationship between ownership structure and capital structure. Available from [www.SSRN.net.com](http://www.SSRN.net.com).
- Cheema, A., F. Bari and O. Saddique, 2003. Corporate governance in Pakistan: Ownership, control and the law. Lahore: Lahore University of Management Sciences.
- Crutchley, C.E. and R.S. Hansen, 1989. A test of the agency theory of managerial ownership, corporate leverage, and corporate dividends. *Financial Management*, 18(4): 36-46.
- DeAngelo, H. and R. Masulis, 1980. Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8(1): 3-29.
- Demsetz, H., 1983. The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26(2): 375-393.
- Fama, E. and M. Jensen, 1983. Separation of ownership and control. *Journal of Law and Economics*, 26(2): 301-325.
- Ferri, M. and W. Jones, 1979. Determinants of financial structure: A new methodological approach. *Journal of Finance*, 34(3): 631-644.
- Friend, I. and L. Lang, 1988. An empirical test of the impact of managerial self-interest on corporate capital structure. *Journal of Finance*, 43(2): 271-281.
- Grossman, S.J. and O.D. Hart, 1980. Takeover bids, the free-rider problem, and the theory of the corporation. *The Bell Journal of Economics*, 11(1): 42-64.
- Harris, M. and A. Raviv, 1990. Capital structure and the informational role of debt. *The Journal of Finance*, 45(2): 321-349.

- Javid, A.Y. and R. Iqbal, 2009. Ownership concentration. Corporate governance and firm performance: Evidence from Pakistan. *The Pakistan Development Review*, 47(4) 643–659.
- Jensen, M. and W. Meckling, 1976. Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.
- Jensen, M.C., 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2): 323-329.
- Johnson, S.A., 1997. An empirical analysis of the determinants of corporate debt ownership structure. *Journal of Financial and Quantitative Analysis*, 32(1): 47-69.
- Kole, S.R., 1995. Measuring managerial equity ownership: A comparison of sources of ownership data. *Journal of Corporate Finance*, 1(3): 413-435.
- Majluf, N. and S.C. Myers, 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2): 187-221.
- McConnell, J.J. and H. Servaes, 1990. Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, Elsevier, 27(2): 595-612.
- McConnell, J.J. and H. Servaes, 1995. Equity ownership and the two faces of debt. *Journal of Financial Economics*, Elsevier, 39(1): 131-157.
- Miller, M. and F. Modigliani, 1967. Estimates of the cost of capital relevant for investment decisions under uncertainty. In *Determinants of Investment Behavior*: NBER: p. 189-214.
- Morck, R., A. Shleifer and R. Vishny, 1988. Management ownership and market valuation. *Journal of Financial Economics*, 20(1/2): 293-315.
- Myers, S.C., 1977. Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2): 147-175.
- Porta, R., La., S. Florencio, Lopez ., A. Shleifer and R. Vishny, 1999. *Investor Protection: Origins, Consequences, and Reform*, NBER Working Papers 7428, National Bureau of Economic Research, Inc.
- Pound, J., 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*, 20 (January–March): 237-265.
- Saravanan , P., 2003. Ownership pattern and debt equity choice of coporates in India : An Empirical Extension. Available from [www.SSRN.net.com](http://www.SSRN.net.com).
- Scott, D. and J. Martin, 1975. Industry influence on financial structure. *Financial Management*, 4(1): 67-73.
- Shleifer, A. and R. Vishny, 1986. Large shareholders and corporate control. *Journal of Political Economy*, 94(3): 461-488.
- Shome, D. and S. Singh, 1995. Firm value and external blocking holding. *The journal of Financial Management*, 24(4).

- Short, H. and K. Keasy, 1999. Managerial ownership and the performance of firms: Evidence from the UK. *Journal of Corporate Finance*, 5(1): 79-101.
- Titman, S. and R. Wessels, 1988. The determinants of capital structure choice. *The Journal of Finance*, 43(1): 1-19.
- Wald, J., 1995. How firm characteristics affect capital structure: An international comparison, Unpublished Working Papers, Department of Economics, U. C. Berkeley, Berkeley, CA.

## **BIBLIOGRAPHY**

- Balakrishnan, S. and I. Fox, 1993. Asset specificity, firm heterogeneity and capital structure. *Strategic Management Journal*, 14(1): 3-16.
- Barton, S. and P. Gordon, 1988. Corporate strategy and capital structure. *Strategic Management Journal*, 9(6): 623-632.
- Born, J. and W. Mc, V., 1993. Insider equity ownership and financial leverage. *Financial Management*, 22(4): 19-21.
- Bowman, R., 1980. The importance of a market-value measurement of debt in assessing leverage. *Journal of Accounting Research*, 18(1): 242-254.
- Chiarella, C., T. Pham, A. Sim and M. Tan, 1992. Determinants of corporate capital structure: Australian evidence. *Pacific-Basin Capital Markets Research*, 3(2): 139-158.
- Cho, M.-H., 1998. Ownership structure, investment, and the corporate value: An empirical analysis. *Journal of Financial Economics*, 47(1): 103-121.
- Himmelberg, C., R. Hubbard and D. Palia, 1999. Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53(3): 353-384.
- Modigliani, F. and M. Miller, 1958. The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, 48(3): 261-297.
- Putterman, L., 1993. Ownership and the nature of the firm. *Journal of Comparative Economics*, 17(2): 243-263.