



Munich Personal RePEc Archive

**Impact of managerial ownership on
financial policies and the firm's
performance: evidence Pakistani
manufacturing firms**

Din, Shahab-u- and Javid, Attiya Yasmin

Comsats Institute of Information Technology, Wah Campus,
Pakistan, Pakistan Institute of Development Economics, Islamabad,
Pakistan

2011

Online at <https://mpra.ub.uni-muenchen.de/37560/>
MPRA Paper No. 37560, posted 29 Mar 2012 12:49 UTC

Impact of Managerial Ownership on Financial Policies and the Firm's Performance: Evidence Pakistani Manufacturing Firms

Shahab-u-Din

Comsats Institute of Information Technology, Wah Campus, Pakistan

E-mail: shahab@ciitwah.edu.pk

Attiya Y. Javid

Pakistan Institute of Development Economics, Islamabad, Pakistan

attiyajavid@pide.org.pk

Abstract

This study evaluates the impact of managerial ownership on the firm's performance and financial policies in the context of Pakistani market for sixty non-financial firms included in KSE 100 index for the period of 2000 to 2007. The analysis support that the concentration of managerial ownership affects the firms financial policies, mainly the leverage and dividend policies. The empirical analysis find out that leverage policy variable influenced managerial ownership negatively, supporting that the lower leverage level leads to high profitability firms engage in low managers' ownership program. The result also determines a negative and significant association among the mangers ownership concentration and dividend policy of the firms. This result is supported by the agency theory prediction suggesting that as a firm has high managerial ownership, the asymmetric information will decrease and directly decrease the effectiveness of the dividend policy. Beside this the firms with higher managerial ownership decrease their perquisites, so the conflict between manager's shareholders can be settled. It is also observed that the managers' ownership concentration in general has a positive relationship with the performance in the corporate culture of Pakistan, where major firms are the family oriented. When the managerial ownership is divided in three levels, low level (0 -5%), moderate level (5%-25% and high concentrated (above 25%), the performance positively affect only at low and moderate level. The ownership beyond 25% has a negative association with performance and support the entrenchment theory

Key words: Managerial ownership, leverage, dividend, agency theory, entrenchment theory.

1. Introduction

The literature on corporate governance presumes a fundamental tension between shareholders and corporate managers (Berle and Means, 1932 and Jensen and Meckling, 1976). While the objective of a corporation's shareholders is a return on their investment, managers are likely to have other goals, such as the power and prestige of running a large and powerful organization, or entertainment and other perquisites of their position. In this situation, managers' superior access to inside information and the relatively powerless position of the numerous and dispersed shareholders means that managers are likely to have the upper hand. The researchers have offered a number of solutions for this agency problem between shareholders and managers which fall under the categories of incentive alignment, monitoring, and discipline. Incentives of managers and shareholders can be aligned through practices such as stock options or other market-based compensation (Fama and Jensen, 1983). Monitoring by an independent and engaged board of directors assures that managers behave in the best interests of the shareholders (Fama and Jensen, 1983). Chief Executive Officer (CEO)'s who fail to maximize shareholder interests can be removed by concerned boards of directors, and a firm that neglects shareholder value is disciplined by the market through hostile takeover (Jensen and Ruback, 1983). The influential work of Jensen and Meckling (1976) has given momentum to the corporate ownership literature by focusing on the separation of ownership control that gives rise to potential conflicts between principals and agents. Jensen and Meckling (1976) argue that managerial ownership in a firm

helps to align the interest of owner and managers and therefore justifying agency problems. An alternative argument is that managers get entrenched when there is high managerial ownership thereby exacerbating the agency problems (Demsetz, 1983; Fama and Jensen, 1983)

The agency costs of equity can be reduced by the third party (debt-holders) to participate in monitoring management while at the same time providing the more structured decision-making by means of contract. Trade off between agency cost of equity and agency costs of debt can be adjusted through dividend and leverage mechanism called as a balancing model of agency cost. Leverage policy is taken to share the agency cost previously borne by stockholders to debt holders so agency cost of equity declines, but compensated with the presence of agency cost of debt. Decision making in dividend and financial policies then affect agency costs borne by the stockholders and debt holders. Agency cost can be controlled through interdependence mechanism between dividend and leverage policies. Copeland and Weston (1992) suggest that when leverage increases, agency costs of debt rises. The higher the leverage level, the more likely for a firm to fall for bankruptcy and debt-holders require additional return to compensate the additional financial risk. The firms are mixture of outside debt and equity financing, where as dividends reduce the costs of these agency conflicts. While leverage reduces the conflict of outside equity, managerial ownership and dividend are important because they reduce the conflict of interest between managers and outside shareholders. Crutchley and Hansen (1989), Leland and Pyle (1977) and Ross (1977) present hypothesis the managerial ownership and financial policies help resolve information asymmetry managers and external investors.

The problems in decision making especially with aligned of interest between agent and principal will leads to appalling decreasing value of the firm. Decision making policy such as dividend and leverage will increase value of the firm as long as the policy able to aligned the self-interest behavior between parties. Separation between ownership and control arise agency problem. Managerial ownership on the other side, try to decrease agency problem by pooling back the ownership structure and control mechanism of the firm. Agrawal and Knoeber (1996) describe the importance of ownership structure as control mechanism in agency problem. They investigate firm performance and mechanism to control agency problems. Their findings support managerial ownership as mechanism of control and affect firm performance. In addition, concentration shareholding by institutional or by block holders can increase managerial monitoring and improve firm performance, as can outside representation on corporate bonds. The use of debt financing can improve performance by inducing monitoring by lenders.

The relationship between manager's shareholding and firm's performance report mixed empirical findings. Two important evidences emerge from the empirical literature¹. First most of these studies provide evidence that insider ownership actually affect firm's value, although the relationship doesn't seem to be monotonic. A positive impact of insider ownership on firm value can be explained by the convergence of interest hypothesis, stating that large equity shares of insider should be associated with higher market valuation due to lower agency costs. In contrast, a negative relationship can be explained by the entrenchment hypothesis, predicating that insider ownership above a certain threshold will have a value destroying effect due to the inherent conflict between large block holders (in this case the management) and the dispersed shareholders. These two hypothesis serve as an explanation for the bell-shaped relationship between insider ownership and firm value find by McConnell and Servaes (1990) or the piecewise linear relationship discover by Moreck *et al.* (1988).

The code of corporate governance introduced by SECP in early 2002 is the major step in corporate governance reforms in Pakistan. The code includes many recommendations in line with international good practice. The major areas of enforcement include reforms of board of directors in

¹ For example Oswlad and Jahera (1991), Mehran (1995). Holthausan and Lacker (1996), Cole and Mehran (1998) find a positive relationship between managerial ownership and performance, Jarrell and Poulsen (1988), Slovin and Sushka (1993) find a negative relationship whilst Morck *et al.* (1988), Herman and Weishbach (1991) document a non-linear relationship. Other empirical evidence shows that this relationship is statistically insignificant (Demsetz and Lehn 1985; Deserts and Villalonga., 2001).

order to make it accountable to all shareholders and better disclosure including improved internal and external audits for listed companies. However, the code's limited provisions on director's independence remain voluntary and provide no guidance on internal controls, risk management and board compensation policies. In Pakistan manufacturing sector 59 percent of the firms are family owned companies and the major shares of these companies are by the owners and managers of the firms (Cheema *et. al.*, 2003). Beside this these firm's have pyramid structure and cross holding ownership structure which leads to agency conflict and the outsiders especially in case of business groups face difficulty to understand the ownership structure of these companies. The family owned companies are typically managed by owners themselves. In case of state owned enterprises and multinationals there is often direct relationship between state/foreign owners and management again bypassing the boards and many important corporate decisions are not made on Boards Annual General Meetings (AGMs) level. The code explicit mentions director's duties to act with objective and independent judgment and in the best interest of company. In business groups boards are dominated by executives and non-executives members of controlling family and by proxy directors appointed to act their behalf. Inter-locking directorships are often used to retain majority control. Family dominated boards are less able to protect minority shareholders right and risk a loss of competitiveness as other boards become more professional.

The main focus of the present study is to examine that financial decisions (leverage and dividend) are affected by managerial ownership. The study also investigate what factors determines the managerial ownership in case of KSE listed non-financial firms. The affect of managerial ownership on firm's performance is examined as the managerial ownership and financial policies help resolve information asymmetry between managers and external investors.

The plan of the study is as follows. The second section briefly reviews the empirical literature review. The methodology and data are discussed in section three. The empirical results are presented in section four and last section concludes the study.

2 Literature Review

There is large body of empirical literature that links the relationship between the ownership structures, firm's value and the financial policies of the firms. The empirical studies about the role of block shareholders strongly emphasize that external block holders have incentives to monitor and influence management appropriately to protect their significant investments (Friend and Lang, 1988). Due to the large economic venture, the investors need to look over the management closely, that the managers don't engage in activities that are unfavorable to the wealth of shareholders. External shareholders reduce the scope of managerial opportunism, resulting in lower direct agency conflicts between management and shareholders (Shleifer and Vishny, 1986). Same evidence is obtained by Shome and Singh (1995) while examining the market reaction to the announcement of acquisitions of large share parcels using event study methodology. They report significant positive abnormal returns related with announcements of block acquisitions by the external share holders and the abnormal returns are positively associated with a reduction in agency costs (through proxy variables). Furthermore, Bethel *et al.* (1998) find that long term operating performance of firms improves subsequent to the acquisition of a block by activist shareholders.

De Angelo and Masulis (1980) find that leverage and dividend are relevant if tax and non-equilibrium condition exist. Koch and Shoney (1999) observe that there is interdependence between leverage and dividend policies concurrently having a significant effect on future cash leverage policy. Harton and Ratnaningsih (2003) show that dividend policy serves as a mechanism affecting leverage policy. Solberg and Zorn (1992) scrutinize interdependence among three policies, leverage, dividend, and insider ownership and find that leverage and dividend do affect managerial ownership, while managerial ownership affects financing and dividend policy. Crutchley and Hansen (1989) finding supports agency theory arguing that agency costs of equity and agency costs of debt can be managed

and controlled by means of interdependence between leverage, dividend and insider ownership. Healy and Palepu (1989) outline, the two decisions of managers that generally have significant impact on stock prices are: choice of how much debt to hold in the firm's capital structure, and choice of how much of earnings to pay out as dividends. Rozeff (1982) reports that managerial ownership act as substitute for dividend as an agency cost reducing benefit. Gerald, Donald and Tomas (1992) conclude that level of insider ownership has negative influence on a firm's debt and dividend levels. Insider ownership itself is related to variables that proxy for the wealth gains from the control potential of the firm. Their result suggests that agency costs and bankruptcy costs also affect a firm's financing decisions. Bathala *et al.* (1994) support the notion that institutional investors serve as effective monitoring agents and help in mitigating agency cost and they find that the debt ratio is inversely related to managerial equity ownership, R&D expenses and growth. Dutta (1999) find that in spite of regulation, insider ownership still serves as substitute signal for dividends, alternately banks with higher levels of managerial equity ownership may systematically choose to pay lower levels of dividends, as managers wish to avoid incurring the penalty of double taxation. It is also possible that higher levels of insider ownership may lead banks to retain more cash flows for other purpose. Mahadwartha (2002) shows that lower dividend level leads to higher probability firms engaging in managerial ownership programs to maintain the effectiveness of reducing agency cost of equity. Hence there is managerial ownership; the usefulness of dividend policy to control agency cost of equity will be lower.

The association between ownership structure and firms performance has been the subject of important and ongoing debate in the corporate finance literature. Agrawal and Mandelker (1990) examine the association between ownership structure and performance measured as cumulative abnormal returns (CAR) by the firm and find that there is significant negative relationship between CAR and anti takeover amendments adoption and the positive relationship between CAR and institutional ownership, concentration of institutional ownership and ownership by 5% block holders. However, insider ownership at any level has no effect on CAR. McConnell and Servaes (1990, 1995) show that there is positive affect of block holder's ownership on Tobin's Q. Himmelberg *et al.* (1999) study the determents of managerial ownership and the extent to which his ownership is endogenously determined by the contracting environment. The study concludes that managerial ownership and firm performance are determined by common characteristics some of which are unobservable to econometrician. Kaserer and Moldenhaure (2007) provide the evidence outside block ownership as well as more concentration insider ownership have positive impact on corporate performance in case of German firms. Hanson and Song (1999) results are consistent with the notion that effective internal control system requires unaffiliated outside directors to monitor managers and stock ownership by chief executive officer to align the interest of decision making with shareholders. Khanna (2007) document that managerial ownership has a significant relationship with firm value controlling for firm fixed effects. The firm's value is impacted by managerial ownership through managerial actions of higher labor expenses, accrual management and conservative capital structure. Fahlenbrach and Stulz (2008) find that managers are more likely to significantly decrease their ownership when their firms are performing well and more likely to increase their ownership when their firms become financially constrained. The results also suggest that large increase in managerial ownership increase Tobin's q, and find no evidence that large decrease in ownership has an adverse impact on firm value. Li *et al.* (2007) find that firms where managerial ownership is high appear to control the growth of their assets more carefully in relation to their profit growth, so the return on assets exhibits a lower decline relative to other firms.

The relation between managerial ownership and the market value of a firm is not a linear relationship, as investigated by Mrock *et al.* (1988) and find that the market value of the firm first increases as insider holdings increase from 0 to 5%, then, as insider holdings increase from 5 to 25% the market value of the firm decrease. Finally, as managerial ownership increased beyond 25% the market value of the decrease. This result provides an evidence of managerial entrenchment. While

lower and higher levels of insider holdings support the notion of insider holdings leading to lower agency costs, the middle level of ownership is a range over which the benefits of net value maximizing behavior on the part of managers exceeds the costs incurred by the lower market price of their equity holding. Welch (2003) and Kahn *et al.* (2007) develop a general non-linear model based on the study of Mrock *et al.* (1988), but they fail to find any significant relationship. Craswell *et al.* (1997) find significant curvilinear relationship only for large firms with a turning point of around managerial ownership of 50%. For the piecewise regression, they use the thresholds used by Morck *et al.* (1988) as well as some other thresholds but they fail to find any significant relationship. The findings by Chen *et al.* (1993) are consistent with the prediction that at a low level of management ownership, both external and internal factors, market for corporate control and management's opposition to takeovers all operative to guarantee a positive relationship between managerial ownership and firm value. Short and Keasey (1999) find out that there is positive significant effect of director ownership and cubic ownership but has a significant negative effect of squared ownership. The polynomials reach its maximum at 16% and its minimum at 42% ownership. The significant control variables are size and growth.

3 Methodological Framework and Data

3.1 Managerial Ownership and Financial Policies

The conflict of agency cost between the managers and shareholder are genuine and very difficult to efficiently reduce. One of the ways to control this matter is for the firm is to issue debt. Leverage policy act as a bonding force for the managers to communicate their good intentions to outside shareholders. Because taking on the debt validate that managers are willing to risk losing control of their firm if they fail to perform effectively. As bonding mechanism, leverage policy will decrease agency conflict of equity but increase the agency cost of debt (Megginson, 1997).

Mahadwarth and Hartono (2002) find a negative relationship between managerial ownership and leverage policy. The firms have managerial ownership program will trend to lower their debt level to reduced the agency conflict. These results also support by the Friend and Lang (1988). The association between leverage policies and managerial ownership program is expected to be negative. Less leverage will increase the probability of a firm to engaging managerial ownership program to multiply the effect the agency cost. Therefore, the following hypothesis is tested:

H₁: There is a negative relationship between leverage and managerial ownership.

Titman and Wessels (1988) argue that a high growth rate indicates greater flexibility in future investments and offers greater opportunities for expropriating wealth from debt holders. Secondly, a high growth rate indicates the probability and success of the firm in investing more resources into the firm. This in turn could be associated with lower information asymmetry costs of equity and hence a preference for equity over debt financing. Myers and Mujlaf (1999) have suggested a negative coefficient for the growth variables. In this study book to market value of equity is defined as growth and used as the proxy of investment opportunity. The hypothesis becomes:

H₂: There is a positive relationship between leverage and Growth.

According to the agency theory framework, the interest of managers of the firms having high managerial ownership, support the interest of the outside share holders and reduced the role of the debt as an agency conflict mitigating devices. Agency theory argues that dividend policy as bonding mechanism to control expropriation of firm's cash flows. Dividend payment avoids management from undergoing perquisites action since cash flow is absorbed to pay dividend for stockholders. Firms with established bonding mechanism and dispersed ownership structure are usually big firms that trend to pay dividend to reduced agency conflict between management and shareholders. On the other hand,

small firms with concentration of ownership structure to certain persons or institution tend to have lower dividend due to relatively less agency conflict (Megginson, 1997) thus firm's size matter in controlling dividend effect to management ownership. If management has ownership of firms' share then dividend will decrease. Another argument is dividend payment reduces firm's asymmetric information. However if firm already has managerial ownership, asymmetric information by definition declines and less dividend is needed for information (Megginson, 1997). Zorn (1982) and Rozaff (1982) find that dividend policy is affected by firms' ownership structure negatively. The hypotheses that we are going to test becomes:

H₃: There is a negative relationship between managerial ownership and dividend.

To some extent the past asset growth predict the future profitability, and the growth potential managers would be less resultant to invest in the firms' equity. The managers could take the advantage of the internal information about the growth prospects of the firm. Managers due to their best knowledge of the projects being commenced by the firms will be more inclined than the external investors to be on the growth prospects. So we develop hypothesis that:

H₄: There is a positive relationship between managerial ownership and growth.

Emmery and Finnerty (1997) suggest that firms with higher dividend level will need additional funds from debt holders. Miller and Rock (1985) also support this argument that higher dividend is a signal of firms increasing profitability in the future. Management sign positive signal through dividend payment that investors realize there is promising investment opportunity which will increase firm's value. In addition, higher payment indicates that firms utilize more leverage to fund investment to keep their capital structure optimum. In the same way Rozeff (1985) argues that higher dividends payments reduce agency conflict between managers and shareholders and finds evidence of relationship among growth, profitability and dividend. Moreover, the documented empirical relationships between dividends and profitability suggest that profitability could help to capture real difference among firms. Investment and growth opportunities affect the dividend policy of the firms. Brook (1984) indicates that if agency cost is high, shareholders invite third party to bear the costs. Debt holders monitor the use of their fund and usually through what is called as debt covenant. Hartono and Ratanningsih (2003) argue that dividend policy positively affects firms leverage policy; on contrast to leverage policy doesn't affect dividend policy. We test the following hypothesis:

H₅: There is a positive relationship between dividend and leverage.

In this study we take growth as proxy of the investment opportunity set (Kallapur and Trombley, 1999). High growth firms have to choose either to pay dividend or to implement capital expenditure related to existing investment opportunity. Imperfect capital market leads to some kind of competition between dividend policy and investment funding in using existing internal cash flows. Free cash flows hypothesis suggest that firms with higher growth pay fewer dividends since most of retained earnings have already been used for dividend increase reflects management confidence about favorable prospects in the future given the sticky dividend assumption. The decision to choose the proportion of dividend paid for outside stockholders is expected to support the hypothesis that in a situation in which managerial ownership exists, signaling hypothesis cannot explain dividend policy phenomenon.

H₆: There is a positive relationship between dividend and growth.

The main issue in estimating the econometric relationship between managerial ownership and financial polices is due to the problem of endogeneity. Keeping in view the problem of endogeneity the

simultaneous regression equations are derived to explain the effect of managerial ownership on the firms' financial policies. To test the above hypothesis the empirical specification of the model proposed by Jensen *et al.* (1992) is used:

$$LEV_i = \alpha_0 + \alpha_1 MO_i + \alpha_2 DIV_i + \alpha_3 G_i + \alpha_4 NE_i + \alpha_5 SIZE_i + \varepsilon_i \quad (1)$$

$$MO_i = \beta_0 + \beta_1 LEV_i + \beta_2 DIV_i + \beta_3 G_i + \beta_4 NE_i + \beta_5 SIZE_i + \varepsilon_i \quad (2)$$

$$DIV_i = \gamma_0 + \gamma_1 MO_i + \gamma_2 LEV_i + \gamma_4 G_i + \gamma_5 NE_i + \gamma_6 SIZE_i + \varepsilon_i \quad (3)$$

Two Stage Least Square (2SLS) is adopted as estimation technique and first lag of dependent and independent variables are used as instruments. The simultaneous equation model is estimated with 2SLS in a system comprising of interdependent endogenous variables. The 2SLS method is preferred over the Ordinary Least Square (OLS) method as the latter would lead to biased and inconsistent parameter estimates

3.2 Managerial Ownership and Firm's Performance

Large empirical literature investigates the relationship between managerial ownership and firm's performance and provides mixed evidence. Wruck (1989) finds non-linear relationship between managerial ownership and firm's performance. Similarly Berle and Means (1932) provide the evidence that an inverse relationship exist between managerial ownership and firm's performance. Jensen and Meckling (1976) argue that agency cost and managerial ownership are negatively related and have positive relationship between managerial ownership and firm's performance. The convergence of interest hypothesis suggests a positive relationship between managerial ownership and firm's performance due to lower agency cost. While a negative relationship between managerial ownership and firm's performance is suggested by the entrenchment hypothesis, explaining that managerial ownership above a certain threshold will have destroying effect due to the conflict between large block holders. The above two hypothesis suggest a bell-shaped relationship between managerial ownership and firm's performance. Higher managerial ownership in the firm motivates the managers to perform well due to the incentive alignment. A manager owning the large fraction of the shares in the firm bears the consequences of managerial action that either create or destroy the performance. As consequences with managers shareholders are likely to work hard and create better investment decisions and high managerial ownership firms should perform better. This study follows the agency theory frame work and following null hypothesis is proposed:

H₇: There is a positive relationship between managerial ownership and firm's performance

Among different ownership pattern managerial ownership seems to be the most controversial as it has ambivalent effects on firm performance. On the one hand, it is considered as a tool for alignment of managerial interest with those of shareholders. Managerial ownership provides managers with monetary incentives to maximize profit and thus improve company performance (Jenson and Meckling, 1976). On the other hand, managerial ownership promotes entrenchment of managers which is especially costly when they have low qualification or prefer to live an easy life (Morck *et al.*, 1988 and. Stultz, 1988). On these findings we develop the following hypothesis:

H₈: Only a moderate level of managerial shareholding can affect firm performance positively.

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 the convergence of interest hypothesis which is challenged by Fama and Jensen (1983) and Deserts (1983). They advocate that managerial share

ownership may have adverse effects on agency conflicts between management and shareholders due to the costs of significant managerial share ownership. They argue that instead of reducing managerial incentive problems, managerial share ownership may establish the in office management team, leading to an increase in managerial opportunism. According to Fama (1980), there are incentives for the managers to control the rest of the managerial team members. On the one hand, there is competition among the top managerial team to achieve the highest and most prestigious positions in the company. This competition encourages monitoring amongst managers, since non-value enhancing activities by other members of the managerial team could give some advantage to the rest of the managers to achieve top positions. On the other hand, the managerial labor market motivates managers to supervise each other's actions. Non-value maximizing activities by a member of the managerial team can have a negative impact on the firm's market value, which in turn can reduce the value of the whole group of managers in the managerial labor market. The expansion of the negative consequences of an individual's opportunistic actions to the rest of the managerial team encourages mutual monitoring amongst managers.

The capability of the managers to perform mutual monitoring depends on the dispersion of managerial power, a mutual monitoring system being more difficult to establish when there is a clear concentration of power in the hands of a single manager. If a single member of the managerial team clearly dominates the others, the rest of the managers could lack the power or even the information to control the head of the organization. Fernandez and Arrondo (2005) and Stultz (1988) show that sufficiently high managerial ownership by allowing managers to block takeover bids, can lower firm value. Morck *et al.* (1988); McConnell and Servaes (1990, 1995); Hermalin and Weisbach (1991); and Holderness *et al.* (1999) find firm value to rise with low levels of managerial ownership and to fall with higher levels of managerial ownership. The combination of the convergence of interests and entrenchment hypotheses suggest a curvilinear relationship between managerial share ownership and corporate value. 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. The hypothesis becomes:

H₉: There is non-linear relationship between managerial ownership and firms performances.

To test the above mentioned hypothesis three performance measures are used: return on asset (ROA), return on equity (ROE) and Tobin Q. The performance measures are regressed on managerial ownership shares and a set of control variables following Chen and Hu (1993). This leads to the estimation of following equations:

$$ROA_i = \alpha_0 + \alpha_1 MO_i + \alpha_2 DIV_i + \alpha_3 LEV_i + \alpha_4 G_i + \alpha_5 NE_i + \alpha_6 SIZE_i + \varepsilon_i \quad (4)$$

$$ROE_i = \alpha_0 + \alpha_1 MO_i + \alpha_2 DIV_i + \alpha_3 LEV_i + \alpha_4 G_i + \alpha_5 NE_i + \alpha_6 SIZE_i + \varepsilon_i \quad (5)$$

$$Q_i = \alpha_0 + \alpha_1 MO_i + \alpha_2 DIV_i + \alpha_3 LEV_i + \alpha_4 G_i + \alpha_5 NE_i + \alpha_6 SIZE_i + \varepsilon_i \quad (6)$$

The estimation procedure for the test of hypothesis is regression framework of panel data estimation technique. The techniques of pooled time series of cross sectional are applicable in situation in which the observations are on N firms for *t* points in time such as yearly in our case. There are two approaches for estimation of the panel data; the fixed effects model (FEM) and the random effect model (REM). The panel data estimation technique takes account of endogeneity and heteroskedasticity in the data.

3.3 Data and Sample Selection

To perform econometric estimation, the sample includes non-financial firms of KSE 100 index for the period 2000 to 2007. KSE 100 index consists of 100 firms, financial and non-financial companies out of which there are 67 non-financial listed companies. Initially we start with 67 firms listed in different sectors, however, due to unavailability of published reports for some firms we exclude seven firms from our sample. At the end we get sample of 60 firms representing manufacturing sector of KSE 100 index. The selected firms cover 80% of market capitalization in year 2008. Most of the variables are obtained from Balance Sheet Analysis of listed firms published by the State Bank of Pakistan². While the ownership variables are calculated from the annual reports of the selected companies. According to rules and regulation of Security Exchange Commission of Pakistan (SECP) the firms are bounded to publish ownership pattern in their annual reports.

4. Empirical Results

The summary statistics of the data is presented in Appendix Table A2, A3 and A4 for sample firms for the period 2000 to 2007. The results show the mean value of the total asset is 13347.76 (million) and the standard deviation is very high showing that we have very larger sized firm and small sized firms in the sample. The value of dividend paid per share ranges from 254.1 to 17.0. The sales growth is maximum 1345.2 and it ranges to a minimum level -100.0 (millions). The net income per share of the firms in the sample is 12.60 (Rs) and the maximum income earned per share by the firms is 63.00 Rs. Similarly the average level of manager shareholding in our sample is 14.74 percent which determine the most firms in our sample have manager holding more than 15%. While the maximum managerial holding in our sample 75.27%. Table A2 presents the summary statistics of the measures of performance: Return on Asset, return on equity and Tobin's ratio. The ROA and ROE is accounting measurement of the performance of the firm while the Tobin's Q is value based measurement of the performance. The average value of the ROA is 11.48%, the ROA mean value 27.11% and Tobin's Q average value is 0.57%. The correlation analysis shows that both performance variables ROA and ROE have positive and significant value with the dividend, growth and net income respectively, except the Tobin's Q. This analysis shows that their no multicollinearity among the variables.

4.1 Relationship between Managerial Ownership and Debt Policy

To analyze the relationship between managerial ownership and firm's debt policy, leverage is regressed on the managerial ownership with set of explanatory variables: growth, total asset and net income. To cope with endogeneity problem 2SLS is used as estimation technique. The first lag of explanatory variables are used as instrument variables. We observe a strong negative relation between the leverage and managerial ownership as presented in the Table 1 column 1. This result supports the hypothesis that there is negative relationship between leverage policy of the firm and managerial ownership. As regards other variables, the result indicates that the leverage has negative and significant effect on the net income; this implies that the lower level of leverage leads to higher profitability in case of firms engage in managerial ownership program. This result supports the evidence that the profitable firms use less debt. The results also shows that the leverage effect the size of the firm positively. The results suggest that the firms set their leverage policy to take advantage of the retained earnings. Therefore we can say that the firms go for leverage to invest in the fixed assets to increase their profitability rather to achieve the investment opportunities. The analysis shows that leverage policy of the firms negatively affect the firm growth. These findings suggest that the managers of the firms struggle to perform, adopt such policies to increase market value of the equity. These findings are confirmed by Titman and Wessels (1988) and Myres and Majluf (1984).

4.2 Relation between Managerial Ownership and Financial Policies

² List of variables is provided in Appendix Table A1.

Using the 2SLS regression framework, managerial ownership is used as dependent variable and regressed on the leverage and dividend with other explanatory variables: growth, total asset and net income. The results are documented at Table 1 column 2. Managerial ownership and dividend have negative and significant relationship which supports the hypothesis that there is negative relationship between managerial ownership and dividend policy. This finding also supports agency theory prediction suggesting that managerial ownership decrease agency cost of equity. Managerial ownership is a self monitoring mechanism and also a bonding mechanism. Managerial ownership is bonded management personal wealth to firm value (shareholders wealth). Secondly, the higher level of managerial ownership leads the situation in personal wealth of management so that it becomes closely tied to firm's wealth, so that management attempts to decrease the risk of losing wealth in this case. We can say that if management has a portion of firm share then dividend will decrease. Empirical evidence in the literature suggests that dividend payment decrease asymmetric information occur within the firms. However, if a firm has managerial ownership program, the asymmetric information by definition will decrease and the effectiveness of dividend policy will decrease. This evidence is also supported by the Pautu (2002) and Amitabh (1999). The results also document a negative but insignificant relation among the managerial ownership and growth of the firms. Managers are risk averse, if the firm has high managerial ownership, the managers of that firm do not avail the investment opportunity due to risk of loss of their wealth. The same results are confirmed by the Jensen *et al.* (1992). There is a negative and highly significant relation between the managerial ownership and size of the firm. The negative coefficient on size is consistent with the hypothesis that managerial ownership takes larger position in the firm where they can exercise the most control. Smaller firms are more focused on the operations, which might give managers greater control of the operations. Similarly the negative coefficient on the size variable exists at least partially because for less wealth is required to win a given percentage of a small firm.

4.3 Relation between Managerial Ownership and Dividend Policy

To find the empirical relationship among the managerial ownership and the firm's financial policies the third step of the study used dividend as dependent variable and regressed on the leverage and managers holding with other explanatory variables growth, size and net income. The results are reported in Table 1 column 3. The empirical result indicates negative and highly significant effect of dividend on the leverage policy of the firms. The result provides the evidence that there is trade-off between agency cost and agency equity and align with the contacting model of the dividend. The increasing level of dividend payout indicates that firm's trend to use leverage to fund its investment since internal cash flows already are used to pay dividend. This result also supports free cash flow hypothesis and suggest that the firm's internal cash flows are used to pay dividend and as a result firms need additional external fund in for of leverage. It also suggests that shareholders of Pakistan do not have any strong contract to force the firms in order not to pay dividend before meeting its debt obligations.

There is a positive and highly significant effect of dividend on the income of the firms, which suggest that the dividend paying firms have earned high profit on their shares. This result indicates that firms generating more earnings pay high dividends. The analysis also finds positive and significant association among the size and the dividend. The results indicate that growth of the firm is negatively and insignificantly related with dividend. Therefore, the investment opportunities do not affect significantly the firm's dividend policy. These results are supported by the finding of the Jensen *et al.* (1992) and Bathala *et al.* (1994).

Table 1: Relationship between Managerial Ownership, Debt and Dividend Polices

| Variable | Model 1 | Model 2 | Model 3 |
|----------|---------|---------|---------|
|----------|---------|---------|---------|

| | | | |
|----------------------|---------|---------|---------|
| Managerial ownership | -0.40* | | 0.60*** |
| | (-2.66) | | (1.80) |
| Dividend | 0.11 | -0.23** | |
| | (1.22) | (-1.97) | |
| Leverage | | -0.04* | -0.01 |
| | | (-2.60) | (-3.42) |
| Growth | -0.91* | -0.40 | -1.66** |
| | (-2.58) | (-0.74) | (1.87) |
| Size | 0.63* | -1.27* | 1.58* |
| | (2.27) | (-5.54) | (2.24) |
| Net income | -0.09 | 0.12 | 1.96* |
| | (-2.99) | (3.40) | (2.32) |
| Constant | -5.40* | 11.9* | -3.71 |
| | (-2.14) | (5.29) | (-0.62) |
| R ² | 0.44 | 0.62 | 0.49 |
| F-statistic | 49.92 | 99.66 | 15.66 |
| DW | | 1.79 | 1.93 |

Note: Two-stage linear regression is used to cope with the endogeneity. Dependent variables are debt, managerial ownership and dividend in Model 1, 2 and 3 respectively. The * indicates significant at 1%, ** indicates significant at 5% and *** indicates significant at 10%

4.4 Managerial Ownership the Firms Performance

To examine the empirical relationship between managerial ownership and firm's performance, the firm's performance is measured by the three variables ROA, ROE and Tobin's Q. The three performance variables are regressed against the managerial ownership and with other control variables size, dividend, net income and growth of the firms. The panel data estimation technique is used which takes account of the problem of endogeneity and heteroskedasticity. The fixed and random effect models are estimated.

Table 2: Impact of Managerial Ownership on Firm Performance

| Variable | ROA | | ROE | | Tobin's Q | |
|-------------------------|------------------|-------------------|------------------|-------------------|--------------------|--------------------|
| | Fixed | Random | Fixed | Random | Fixed | Random |
| C | | 10.51* (8.50) | | -0.27* (-2.6) | | 0.16* 2.34 |
| Managerial ownership | 0.02 (0.21) | -0.09** (-2.5) | 0.02 (0.069) | -0.03* (-2.8) | 0.003 (-0.08) | 0.001 (-0.70) |
| Dividend | 0.16* (3.33) | 0.21* (5.07) | 0.64* (3.63) | 0.95* (7.47) | 0.001*** (1.32) | 0.001** (1.59) |
| Leverage | 0.000 (-1.05) | 0.00 (-1.90) | 0.00 (-2.2)** | 0.00 (-2.9)** | 0.000 (2.70)** | 0.000 (2.99)** |
| Growth | 0.02* (2.99) | 0.02* (2.62) | 0.04** (1.52) | 0.03*** (1.49) | 0.002 (-0.96) | -0.001 (-0.84) |
| Size | 0.01* (-5.1) | 0.01* (-6.37) | 0.51 (0.29) | 1.57*** (1.42) | 0.06* (7.39) | 0.05* (6.65) |
| Net Income | 0.24* (7.57) | 0.25* (8.55) | 0.60* (5.07) | 0.62* (6.31) | -0.003 (4.72) | -0.002* (-4.70) |
| R ² | 0.68 | 0.66 | 0.524 | 0.47 | 0.66 | 0.59 |
| Adjusted R ² | 0.63 | 0.65 | 0.48 | 0.46 | 0.61 | 0.41 |
| F-statistic | 170.30 | | 87.158 | | 156.42 | |
| DW Stat | 1.59 | 1.82 | 2.0 | 1.83 | 1.79 | 1.79 |
| observations | 461 | 461 | 460 | 460 | 460 | 460 |

Note: Panel Regression both the fixed and random models are used. Dependent variable are ROA, ROE and Q (Performance measures). The * indicates significant at 1%, ** indicates significant at 5% and *** indicates significant at 10%

The regression results reported in Table 2 document that the ROA and ROE both have a positive and insignificant affect the managerial ownership in the fixed effect model. Therefore, we can say that the ownership concentration do not affect the firm's performance. When the random effect model is applied the finding are contradictory with the fixed effect model. The regression results document negative and significant coefficient of managerial ownership with the ROA and ROE. Our results are supporting the entrenchment hypothesis which suggests a negative relationship managerial ownership and firm's performance, explaining that managerial ownership above a certain threshold destroys this effect due the conflict between manager and large block holders. The entrenchment theory emphasize that the mangers of the firm use the resource for their personal benefit, and decrease the firm's performance. However, these results do not support our hypothesis that there is positive relationship between managerial ownership and performance of the firm and our hypothesis do not support the agency theory. Our finding contradicts with the agency theory that as the managerial ownership increases the performance also increases. The agency theory argue as the consequences with managers shareholders are likely to work hard and create better investment decisions and high managerial ownership firms should perform better.

To sum up, our findings do not support by the agency theory and also deviate for the findings of Jensen and Meckling (1976). However, this finding is supported by the Morck and Vishny (1987) that the effective control of managers leads to indulge their preferences for non-maximization behavior, although to more limited extent than if they have effective control but no claim on the firm's cash flow. The relationship between the managerial ownership and the performance variables Tobin's Q is ambiguous and contradicting. The literature documents both and positive and negative relation between Tobin's Q and management ownership. The findings show a negative and significant relationship in both fixed and random effect models. Our findings are supported by the results document by the Chen (1993) that a firm performance is positively related with Q when the ownership is low and when the ownership level reaches beyond 5% the relationship becomes negative due the management entrenchment factor become more prominent at this point. The results also relate with the findings of Khan (2007) who shows the negative and significant relation among the Q and managerial ownership form Australian capital market.

4.5 Threshold Level of Managerial Ownership on the Firm's Performance

The level of ownership concentration stake by manager's effect the firm's performance is a debatable issue in the finance literature. Different studies use different levels of managerial ownership stakes and documented different impact for the level of mangers ownership concentration on the firm's performance. To elaborate this issue in view of the predominance of family based firms in the Pakistan capital market scenario, mangers are usually part of the controlling family, the share holding of these officers and directors might have different effect on the firm's performance. At any given ownership concentration, some board members might influence on the corporate decision making than the others. e.g. leadership by the firm's founders or by their descendants might have different effects on performance than professional managers or by officers who are not related to founders. To investigate the impact of this ownership concentration on firm value, the level of managerial ownership is divided in to the threshold. 0% to 5% as low level of managerial ownership, 5% to 25% moderate level of managerial ownership and above 25% concentrated level of managerial ownership.

The results are presented in Table 3 and provide the evidence that mangers share ownership effect the firms performance at the level of concentration from 0% to 5%, both the performance indicators ROA and ROE have positive and significant association with ownership. But again the performance variable Q shows negative and significant value in both the fixed and random effect. The finding for Tobin' Q are consistent with the findings of Khan (2007), who also come up with same conclusion in case of Thai Market for low level of managerial ownership. Similarly moderate level of managerial ownership .i.e. 5% to 25% we also have positive and significant association of managerial ownership with performance of the firms. The third performance variable that is Tobin's Q also shows

positive and significant values means that at moderate level manager's ownership concentration have positive effect using Q performance measure of the firm.

When the high level of managerial ownership is taken with the performance measurements the results are consistent because all the performance variables exhibit negative association with managerial ownership above 25%. This supports the entrenchment theory and convergence theory because as the managerial ownership exceeds above 25 percent the managers become self centered and use firm's wealth for personal benefits rather increasing the value of the firm from shareholders point of view. Therefore, the results support our hypothesis that the firm's performance is positively associated with managerial ownership at moderate level of managerial ownership from 5% to 25%. In the Pakistani equity market scenario where major of the firms are family owned, and the family members are the officer and directors of the firm and the major shareholders. These major shareholders become self centered and use the resource for their personal benefit rather for the stock-holders. This can also supported by the entrenchment and convergence theory that managerial ownership above a certain threshold will destroy the firm's performance due to the conflict between large block holders and minor share holders. This also explain that at certain threshold managerial ownership (above 25%) the managers of that firms become conservative and entrenched the firms resources for their personal benefits and don't avail the investment opportunism and they are no risk takers due to their self interest. Our study also concludes that there is non-linear relation between the managers share holding and firm's performance in the Pakistani equity market.

Table 3: Evidence on Threshold Level of Managerial Ownership and Firm Performance

| Variable | ROA | | ROE | | Tobin's Q | |
|-------------------------|-------------------|--------------------|-------------------|-------------------|--------------------|--------------------|
| | FIX | RAM | FAX | RAM | FAX | RAM |
| MO (0% to 5%) | 6.96* (4.08) | 4.58* (3.80) | 7.04* (3.93) | 6.42* (2.40) | -0.04* (-3.909) | -0.04** (-1.68) |
| MO (5% to 25%) | 1.92* (3.26) | 1.06* (2.85) | 1.56** (1.71) | 4.32* (2.93) | 0.01*** (1.42) | 0.04** (1.77) |
| MO (Above 25%) | -0.01 (- 0.43) | -0.04 (- 1.05) | -0.21 (- 1.13) | -1.03 (-1.20) | -0.002* (-1.97) | -0.01 (-0.04) |
| Dividend | 0.16* (3.33) | 0.21* (5.07) | 0.64* (3.63) | 0.95* (7.47) | 0.001*** (1.32) | 0.001*** (1.59) |
| Leverage | 0.01 (-1.05) | 0.001** (-1.90) | 0.002* (-2.2) | 0.001* (-2.9) | 0.01* (2.70) | 0.002* (2.99) |
| Growth | 0.02* (2.99) | 0.02* (2.62) | 0.04*** (1.52) | 0.03*** (1.49) | 0.002 (-0.96) | -0.01 (-0.84) |
| Size | 0.001* (-5.1) | 0.001* (-6.37) | 0.51 (0.29) | 1.57*** (1.42) | 0.06* (7.39) | 0.05 (6.65) |
| Net Income | 0.24* (7.57) | 0.25* (8.55) | 0.60* (5.07) | 0.62* (6.31) | -0.003* (4.72) | -0.002* (-4.7) |
| R ² | | | | | | 0.76 |
| Adjusted R ² | | | | | | 0.75 |
| D. W. Stat | | | | | | 1.73 |

Note: The * indicates significant at 1%, ** indicates significant at 5% and *** indicates significant at 10% level

5 Summary and Conclusions

The present study elaborates the empirical impact of managerial ownership on the firm's performance as well as the firm financial policies focusing the listed non-financial firms of Pakistan. All the previous studies are focused on the agency theory and suggest that firm's performance can be positively affected by the agency conflict between management and shareholders, however this study extend the analysis and focus both the entrenchment and agency theory. The sample consists of sixty non-financial firm of the KSE 100 index and the period of the study cover 2000 to 2007. The main

issue in our estimation procedure is the endogeneity which is taken account of by using 2SLS and panel data estimation techniques.

The analysis support that concentration of managerial ownership affects the firms financial policies, mainly the leverage and dividend policies. The empirical analysis find out that leverage policy variable influence managerial ownership negatively, supporting that the lower leverage level leads to high profitability for firms engage low managers' ownership program. The result also determines a negative and significant association among the mangers ownership concentration and dividend policy of the firm. This result is supported by the agency theory prediction suggesting that a firm has high managerial ownership program, the asymmetric information will decrease and directly decrease the effectiveness of the dividend policy. Beside this the firms with higher managerial ownership decrease their perquisites, so the conflict between manager's shareholders can be settled.

Secondly it is observed that in general the managerial ownership positively affect the firm's performance in the corporate culture of Pakistan where major firms are the family owned and the members of family are the officers and managing director of these firms. The director and family mangers have great influence on corporate decision making than the others.

Thirdly, when the ownership level of mangers is a segregated and check out their influence on the corporate performance, the threshold of mangers ownership from 0% to 5% affect the firm's performance positively. Likely when the managers' ownership is form 5% to 25% also affect the firms positively and support the entrenchment theory that at moderate level mangers ownership affect the firms performance positively. When the ownership is above 25% it negatively effect firms performance due the conservation and self-centered and entrenchment of the mangers. We also find out there is bell-shaped/non-linear relationship between managers share holding and the firm's performance in the equity market of the Pakistan. Our results are confirmed with Kumar (2002) for Indian Market that the directors /mangers influence the performance of the firm beyond a certain threshold and which is consistent with the fact that many Indian corporate are family dominated enterprises. The implication is that managerial ownership structure related to financial policies of the firm and hence decision regarding the issues of equity. In Pakistan's corporate structure, with concentrated ownership managers play an important role in increasing the value of the firm.

References

- [1] Agrawal, A. and G. Mandelker, 1987. "Managerial Incentives and Corporate Investment and Financing Decisions", *Journal of Finance* 42(4), 823 - 837.
- [2] Attiya y Javid, Robina Iqbal 2008. "Does Corporate Governance Affect a Firm's Performance: A Case Study of Pakistani Market", *NUST Journal of Business and Economics*, 1(1), 11-23.
- [3] 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.
- [4] 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.
- [5] Allen, D., 1993. "The Pecking Order Hypothesis: Australian Evidence", *Applied Financial Economics* 3(2), 101-112.
- [6] Amitabh, S. Duttan, 2002. "Managerial Ownership, Dividend and Debt Policy in the US banking Industry", *Journal of Finance* 25.
- [7] Brailsford, J. Timothy, Oliver, R. Barry and Pua, L. Sndara, 2002. "Theory and Evidence on the Relationship between Ownership Structure and Capital Structure", *Journal of Accounting and Finance* 42, 1-26.
- [8] Ben-Amar, W., and Andre, P., 2005. "Separation of Ownership from Control and Acquiring Firm Performance: The Case Study of Family Ownership and Control", *Working Paper*, The Social Sciences and Humanities Research Council of Canada (SSHRC).

- [9] Bevan, A., Estrin, S., and Schaffer, M. 1999. "Determinants of Enterprise Performance during Transition". *Working Paper 99/03*. Centre for Economic Reform and Transformation (CERT).
- [10] Berle, A., and Means, G., 1932. *The Modern Corporation and Private Property*, New York: Macmillan.
- [11] Bathala, Chenchuramaiah T. P. Moon Kenneth and Ramesh P.Rao, 1994. "Managerial Ownership, Debt Policy and the Impact of Institutional Holdings: An Agency Perspective", *Journal of Financial Management* 23.
- [12] Bergloef, E., and Von Thadden, E.L., 1999. "The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries", (Paper presented at the Annual World Bank Conference on Development Economics, Washington, D.C.).
- [13] Brickley, J.A., R. C. Lease and C.W Smith, 1988. "Ownership Structure and Voting on Anti-takeover Amendments", *Journal of Financial Economics* 20, 267-291.
- [14] Bardley, M. G., A. Jarrell and E. H. Kim, 1984. "On the Existence of an Optimal Capital Structure: Theory and Evidence", *Journal of Financial Economics* 47, 103-121.
- [15] Crutchley, C. E., and R. S. Hansen, 1989. "A Test of Agency Theory of Managerial Ownership, Corporate Leverage, and Corporate Dividend", *Financial Management*, 36-46.
- [16] Chang, S. J. 2003. "Ownership Structure, Expropriation, and Performance of Group-Affiliated Companies in Korea. *Academy of Management Journal* 2: 238-253.
- [17] Cheema, A. 2003. Corporate Governance in Pakistan; Issues and Concerns. *The Journal* 8: 7-19, NIPA, Karachi.
- [18] Cheema, A., Bari, F., and Saddique, O. 2003. "Corporate Governance in Pakistan: Ownership, Control and the Law", Lahore University of Management Sciences, Lahore.
- [19] Cubbin, J., and Leech, D., 1983. "The Effect of Shareholding Dispersion on the Degree of Control in British Companies: Theory and Measurement. *The Economic Journal* 93, 351-369.
- [20] Daily, C. M., Johnson, J. L., E. Ustrand, A. E. and Dalton, D. R., 1998. "Compensation Committee Composition as Determinant of CEO compensation. *Academy of Management Journal* 41: 209-220.
- [21] Daily, C. M., Dalton, D. R. and Rajagopalan, N., 2003. "Governance through Ownership: Centuries of Practice, Decades of research", *Academy of Management Journal* 46(2), 151-158.
- [22] Dalton, D. R., Daily, C.M., Certo, S. T. and Roengpitya, R., 2003. "Meta-Analyses of Financial Performance and Equity: Fusion or Confusion?" *Academy of Management Journal* 46, 13-26.
- [23] De Miguel, A., Pindado, J., and De laTorre, C., 2005. "Ownership Structure and Performance: A Comparison of Different Corporate Governance Systems. *Corporate Ownership and Control* 2: 76-85.
- [24] Demsetz, H., 1983. "The Structure of Ownership and the Theory of the Firm. *Journal of Law and Economics* 26: 375-390.
- [25] Demsetz, H., Lehn, K., 1985. "The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political Economy* 93, 1155-1177.
- [26] Demsetz, H., Villalonga, B., 2001. Ownership Structure and Corporate Performance. *Journal of Corporate Finance* 7: 209-233.
- [27] Emery, D. R., and J. D. Finnerty, 1997. "Corporate Financial Management".
- [28] Ferrei, M. and W. Jones, 1979. "Determinants of financial structures: A New Methodological Approach", *The Journal of Finance* 34, 631-644.
- [29] Friend, I. and L.H.P Lang, 1998. "An Empirical Test of the Impact of managerial self-interest on corporate capital structure", *The Journal of Finance* 43, 271-282.
- [30] Emmons, W. R., and Schmid, F.A., 1998. "Universal Banking, Control Rights, and Corporate Finance in Germany". *Review*, Federal Reserve Bank of St. Louis.
- [31] Fama, E. F., Jensen, M. C.1983a. "Agency problems and residual Claims". *Journal of Law and Economics* 26 (2): 327- 349.

- [32] Fama, E., and Jensen, M. C. 1983b. "Separation of Ownership and Control". *Journal of Law and Economics* 26: 301– 325.
- [33] Fama, E., 1980. "Agency Problems and the Theory of the Firm". *Journal of Political Economy* 88, 288-307.
- [34] Fama, E., and Jensen, M. C. 1985, "Organization forms and investment decision". *Journal of Financial Economics* 14: 101-119.
- [35] Faccio, M., Lang, P. H., and Young, L. 2001. "Dividends and expropriation". *American Economic Review* 14: 301-325.
- [36] Kumar, Jayesh, 2002. "Does Ownership Structure Influence Firm's Value? Evidence from India" presented at the Sixth International Conference of the Association of Asia-Pacific Operational Research Societies.
- [37] Kaserer, Chrispo, and Moldenhauer, Benjamin (2007). "Insider Ownership and Corporate Performance: Evidence from Germany", CEFS Working Paper Series.
- [38] Khan, Arifur, Rahman, and Balachandran, Balasingham, 'Managerial ownership and firms performance: Evidence from Australia', *Journal of Financial Economics*.
- [39] Faccio, M., Lang, L. 2002. "The ultimate ownership of Western European corporations". *Journal of Financial Economics* 65, 365– 395.
- [40] Feinberg, R. M. 1975. "Profit Maximization vs. Utility Maximization". *Southern Economic Journal* 42, 130-134.
- [41] Fernchdez, C., and Arrondo, R. 2005. 'Alternative internal control as substitutes of the board of directors', *Corporate Governance* 13: 856-866.
- [42] Ghobadian Abby, Regan O' Nicholas, 2006. "The Impact of Ownership on Small Firm Behavior and Performance", *International Small Business Journal* 24.
- [43] Hextrix, J. Lawrence and Chan, Haiyang 1993, 'Management ownership and corporate value', *Journal of Managerial and Decision Economics*, Vol. 14, 335-346.
- [44] Hasan, S., T. Christopher and R. Evans, 1988, "Directors Remuneration and Firm Performance' Malaysian Evidence", Working Paper Multimedia University.
- [45] Jensen, G.R., D.P. Solberg and T.S. Zorn, 1992, 'Simultaneous Determination of Insider Ownership, Debt and Dividend Policies', *Journal of Financial and Quantitative Analysis*, 247-263.
- [46] Jensen, M.C., K.J. Murphy, 1990, 'Performance Pay and Top-Management Turnover', *The Journal of Finance*, 3-21.
- [47] Jensen, M.C., 1996, 'Agency cost and Free cash Flows, Corporate Finance, and Takeovers', *American Economic Review*, 323-329.
- [48] Megginson, W. L., 1997. "*Capital Structure Theory, Corporate Finance Theory*, Addison-Wesley.
- [49] Mayers, S.C., 1997, 'The Determents of Corporate Borrowing' *Journal of Financial Economics*, 5, 147-176.
- [50] Muravyev Alexander (2002). "Federal State Shareholdings in Russian Companies: Origin, Forms and Consequences for Enterprise performance", *BOFIT Discussion papers*, No.12.
- [51] Omran Mohammad (2004). "The Performance of State Owned Enterprises and Newly Privatized Firms: Empirical Evidence from Egypt", *The Arab Academy of Science and Technology and Arab Monetary Fund*.
- [52] Ping Jiang (2004), "The Relationship between Ownership Structure and Firm performance: An Empirical Analysis over Heilongjiang Listed Companies", *Nature and Science*, 2:4, pp.87-90.
- [53] Qi Daqing, Wu Woody, Hang Hua (1999). "Shareholding Structure and Corporate Performance of Partially Privatized Firms: Evidence from Listed Chinese Companies", the Chinese university of Hong Kong.
- [54] Rozeff, M. S., 1982, 'Growth Beta and agency costs as Determinants of Dividend Payout ratio', *Journal of Financial Research*, 249-259.

- [55] Yiu Ka Fung, Wing Kong (1999). "Profitability, Ownership Structure and Technical Efficiency of Enterprises in the People's Republic of China: A Case of Manufacturing Industries in Shinghai", *Asia Pacific Journal of Management* 16, pp.351-367.

Appendix

Table A1: Set of Variables

| Financial Characteristics | | Explanatory Variables |
|----------------------------------|------|--|
| Managerial Ownership | MO | Percentage of ordinary share owned by Managers and directors of the firm |
| Dividend | DIV | Dividend paid per share |
| Leverage | LEV | Long term debt divided by total long term debt plus market value of the common stock outsiders own |
| Size | SIZE | Natural log of total assets |
| Growth | G | Book to market value of equity |
| Net income | NE | Net income over net sales |
| Return on Asset | ROA | Profit before depreciation, interest and tax (PBDIT)/ total assets. |
| Return on equity capital | ROE | PBIT / the total outstanding paid up equity capital of the firm |
| Tobin's Q | Q | Total Borrowings + Market Value Equity) / Total assets |

Table: A2 Descriptive statistics

| | DIVID | GROW | LVRGE | MO | NE | TASSET |
|-----------|-------|---------|----------|-------|---------|----------|
| Mean | 10.18 | 20.52 | 256.18 | 14.74 | 12.61 | 13347.76 |
| Median | 6.20 | 12.30 | 138.80 | 0.01 | 63.00 | 5556.90 |
| Maxim | 254.1 | 1345.2 | 30980.0 | 75.27 | 20.70 | 150655.7 |
| Minim | 17.0 | -100.00 | -2753.60 | 0.00 | -106.40 | 0.00 |
| Std. Dev. | 20.05 | 68.86 | 1459.85 | 20.98 | 21.81 | 22809.59 |
| Skewness | 6.75 | 15.40 | 19.95 | 1.02 | 2.68 | 3.53 |
| Kurtosis | 65.33 | 294.024 | 420.175 | 2.460 | 20.49 | 17.62 |
| Obser | 469 | 469 | 469 | 469 | 469 | 469 |

Table: A3 Descriptive statistics of performance variables

| | ROA | ROE | TOBNSQ |
|-----------|---------|---------|--------|
| Mean | 11.48 | 27.11 | 0.57 |
| Median | 10.40 | 25.90 | 0.58 |
| Maximum | 50.10 | 302.75 | 1.78 |
| Minimum | -114.40 | -293.61 | -0.15 |
| Std. Dev. | 15.05 | 43.69 | 0.24 |
| Skewness | -1.08 | 0.099 | 0.52 |
| Kurtosis | 12.94 | 17.13 | 5.83 |
| Obser | 469 | 469 | 469 |

Table: A4 Correlation Matrix

| | DIV | G | LEV | MO | NE | ROA | ROE | Q | SIZE |
|------|-------|-------|-------|-------|-------|-------|-------|------|------|
| DIV | 1 | | | | | | | | |
| G | 0.02 | 1 | | | | | | | |
| LEV | -0.01 | -0.08 | 1 | | | | | | |
| MO | 0.03 | -0.04 | -0.03 | 1 | | | | | |
| NE | 0.55 | 0.04 | -0.05 | -0.04 | 1 | | | | |
| ROA | 0.44 | 0.10 | -0.13 | -0.09 | 0.55 | 1 | | | |
| ROE | 0.47 | 0.06 | -0.14 | -0.01 | 0.51 | 0.56 | 1 | | |
| Q | -0.04 | -0.05 | 0.15 | 0.08 | -0.19 | -0.43 | -0.03 | 1 | |
| SIZE | 0.06 | -0.06 | -0.07 | -0.10 | 0.07 | -0.06 | 0.12 | 0.01 | 1 |