SECTION 2
OWNERSHIP STRUCTURE

MANAGEMENT OWNERSHIP AND FIRM PERFORMANCE: EVIDENCE FROM AN EMERGING ECONOMY

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Abstract

Due to the separation of ownership and control in modern corporation, the form of relationship between firm performance and insider ownership has been the subject of empirical investigation for last many decades. It is argued, that as managers’ equity ownership increases, their interests coincide more closely with those of outside shareholders, and hence, the conflicts between managers and shareholders are likely to be resolved. Thus, management's equity ownership helps resolve the agency problem and improve the firm's performance (Jensen and Meckling, 1976; Agrawal and Knoeber, 1996; Chen et al., 2003). However, several studies suggest that management's ownership does not always have a positive effect on corporate performance (Demsetz and Villalonga, 2000; Cheung and Wei, 2006). Most of the empirical studies on this issue have focused on the developed economies and there is little empirical evidence on the emerging economies in general and almost no work has been done on emerging economy of Pakistan in particular. Therefore, present study is an effort to analyze the relationship between insider ownership and firm performance in emerging market of Pakistan while taking a sample of 100 firms listed on Karachi Stock Exchange. In spite of entirely different characteristics of data, it has been observed that there is strong positive relationship between insider ownership and firm performance in Pakistan and the results of cross-sectional regression are consistent with theory of “convergence of interest” of relationship between insider ownership and firm performance. Although these results did not conform with the theory “ownership entrenchment” that have proved true in many developed economies yet the empirical results have provided the Pakistani corporate sector positive indications to solve the agency problem through stock options for their employees.

Keywords: Insider Ownership, Firm Performance, Convergence of interest theory, Pakistan

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1. Introduction

The role of ownership structure in solving the agency problem and improving the firm performance has been the subject of an important and ongoing debate in the corporate finance literature for last few decades.
from a divergence of interest between the owners and the managers of the firm (Jensen and Meckling, 1976). However, it may become convergent either when a large fraction of shares are held by few owners or the owners are performing as managers in the firm. Researchers have extensively studied the conflict between managers and owners and its influence on firm’s performance, yet, the research on understanding the differences in behavior of different shareholder identities is limited. On the one hand, a rich empirical literature has investigated the efficacy of alternative mechanisms in terms of the relationship between takeovers, performance, managerial pay structure and performance of the firm and on the other hand, the separation of ownership and control, and form of the relationship between the performance of firms and insider ownership has been the subject of empirical investigation for last many decades. It is argued, that as managers’ equity ownership increases, their interests coincide more closely with those of outside shareholders, and hence the conflicts between managers and shareholders are likely to be resolved. Thus, management's equity ownership helps resolve the agency problems and improve the firm's performance (Jensen and Meckling, 1976; Agrawal and Knoeber, 1996; Chen et al., 2003).

However, several studies suggest that management's ownership does not always have a positive effect on corporate performance. (Fama and Jensen, 1983) demonstrate various possibilities that managers who own enough stock to dominate the board of directors could expropriate corporate wealth. A large-block shareholder could, for example, pay himself an excessive salary, negotiate 'sweetheart' deals with other companies he controls, or invest in negative-net-present-value projects. (Stulz, 1988) explains how owning large blocks makes it easier for managers to be entrenched. Thus, greater stock ownership by managers increases the power of the internal constituency, but decreases the power of the external constituency in influencing corporate performance.

The existing empirical studies focusing on the relationship between insider ownership and firm performance have provided contradictory evidence in developed as well as developing economies. Moreover, most of the empirical studies on this topic have covered the developed economies and there is little work done on the emerging economies in general and economy of Pakistan in particular. In case of Pakistan, it is a fact that during the period under study (2002-05), the low interest rate environment and investor friendly policies of the Government of Pakistan coupled with positive geopolitical developments have paved the way for the macroeconomic conditions conducive for the development of the equity and money markets of the country. The increased investor’s confidence along with the improvements in the corporate earnings has contributed to the impressive performance of the equity markets as compared to the other South East Asian economies. Therefore, it is imperative to study the corporate governance characteristics of this growing market to achieve a consistent positive performance of the equity market. Therefore, the present study is an effort to provide empirical evidence on the insider ownership and its impact on firm performance from emerging economy of Pakistan. It is expected that the outcome of research may provide an insight into this important issue which will be useful for both the investors and regulators of the emerging economies.

2. Literature Review

Existing literature on the relationship between insider ownership and corporate performance has reported three different dimensions of this relationship. It can take the form of convergence of interest (Linear positive) or entrenchment behavior (Non-linear) or ownership structure as indigenous outcome (No relationship). As firm size increases, diffuseness of ownership renders owners of shares powerless to constrain professional management that owns a small portion of shares. The separation of ownership and control creates conflict of interest between owners (principal) and managers (agents). When the interests of managers do not naturally coincide with that of the owners of the firm, this would seem to imply that corporate resources are not used efficiently to pursue the goals of shareholders. Therefore, managers are inclined to use the resources of the firm for their own benefits. In this scenario, owners may offer stock option for managers to reduce the agency cost and create the convergence in the interest of both parties.

Jensen and Meckling (1976) investigated this issue first time and showed empirically how the allocation of shares among management and owner can influence the firm performance. The stockholders were divided into two groups: insider shareholders who manage the firm and have exclusive voting rights and outside shareholders who have no voting rights but, both groups were entitled for the same dividends per share. However, the insider shareholders were able to augment this stream of cash flow by consuming additional non-marketable perquisites. In this situation, there was an incentive for the managers to adopt investment and financing policies that benefit them, but reduce the payoff to outside stockholders. Thus, the value of the firm depends on the amount of shares owned by the insiders. The greater the proportion of shares owned by the insiders, the greater would be the value of the firm.

Later, (Agrawal and Knoeber, 1996) selected the Forbes 800 firms to study the firm performance and mechanism to control the agency cost. The findings of
cross-sectional OLS regression reported a positive relationship between insider shareholding and Tobin’s Q of largest firms of the world. Furthermore, (Sarkar and Sarkar, 2000) provided the evidence on the role of insider shareholders in monitoring the firm value with respect to a developing and emerging economy of India. A sample of 1567 manufacturing Indian firms listed at Bombay Stock Exchange during the period of 1995-96 was selected. The results of piece-wise linear regression reported a positive relationship between insider holding and firm value which is consistent with “convergence of interest” hypothesis.

Ang et. al. (2000) postulated the following hypotheses derived from agency theory when compared to the base case: (i) agency costs are higher at firms whose managers own none of the firm’s equity, (ii) agency cost is an inverse function of the managers’ ownership stake, and (iii) agency costs are an increasing function of the number of non-manager shareholders. They utilized a sample of 1,708 small corporations from the FRB/NSSBF database of private US firms and found that agency costs (i) are significantly higher when an outsider rather than an insider manages the firm; (ii) are inversely related to the manager’s ownership share; (iii) increase with the number of non-manager shareholders, and (iv) to a lesser extent, are lower with greater monitoring by banks. The relationship between insider ownership and firm performance in Asian markets was studied by (Mitton, 2002) who took a sample of 398 firms from Indonesia, Korea, Malaysia, Philippines, and Thailand, to study the firm-level differences in variables related to corporate governance and their impact on firm performance during the East Asian financial crisis of 1997–1998. The regression results of crisis-period stock returns and ownership structure variables are consistent with the idea that if shareholders are involved in management they could have more opportunity and power to enhance efficiency of the firm. Therefore, relationship between insider holding and firm performance is positive for the selected Asian economies during the study period.

Recently, (Chen et al., 2003) studied the relationship between insider ownership and Tobin’s Q for 123 Japanese firms from 1987 to 1995. Managers in Japanese firms own a smaller stake in their firms relative to their US counterparts. The initial analyses using an Ordinary Least Squares (OLS) regression model showed a negative relation between Tobin’s Q and managerial ownership at low levels of ownership and vice-versa at higher level. However, when the fixed effects of the firm were controlled, as suggested by the literature, a different conclusion was reported. Specifically, results indicated that Tobin’s Q increases monotonically with managerial ownership. Therefore, the findings suggested that as ownership increases, there is a greater alignment of managerial interests with those of stockholders. Furthermore, (Lemmon and Lins, 2003) investigated the effect of managerial shareholding on firm valuation by taking the sample of 800 firms from eight East Asian economies during the financial crises of 1997-98. They reported a positive and linear relationship between managerial ownership and firm value.

On the other hand, most of the researchers recognized that when a manager owns a stake in the firm’s shares, it would motivate him to work for the value maximization of their shares. In contrast, the managers who control a substantial fraction of the firm may have enough voting power to guarantee their employment with the firm at an attractive salary. With effective control, the managers may indulge themselves in non-value maximizing behavior. This entrenchment theory predicts that corporate assets can be less valuable when the stake of managers increase from a certain level in firm’s equity. Therefore, the relationship between the insider ownership and firm performance will be non-linear.

In the same context, (Morck et al., 1988) validated the relationship of insider ownership and firm performance on a sample of 371 Fortune-500 firms in 1980. Their reasoning was based on the argument that there are two forces that shape the behavior of managers, first is the tendency to use corporate sources for their own best interest and second for the value maximization of shareholders. The managers’ response to these opposing forces and the relationship between ownership & performance depends upon the force that dominates the other over any particular range of insider ownership. It is a natural tendency that managers prefer to allocate corporate resources in their own best interests, which may conflict with the interests of owners. As insider ownership increases, their interests are likely to coincide more closely with those of shareholders. The first of these forces has a negative effect on the firm performance, whereas the second has a positive effect. Based on this reasoning, their tests reported that the Tobin’s Q rises as the board ownership increases from 0% to 5%, falls form 5% to 25%, and then rises slowly. The entrenchment effect dominates the convergence of interest effect in the range between 5% to 25% insider ownership.

Stulz (1988) focused on the importance of the takeovers for disciplining corporate managers. The mathematical models proved that the premium that a hostile bidder must pay to gain control of target firm increases as the insider ownership increases, but the probability that the takeover will succeed decreases. When insiders own a small fraction of the shares, it is more likely that a hostile takeover will succeed at a relative lower premium. As insider ownership increases, the probability of a successful hostile takeover, for a given premium will decline. At 50 % insider ownership, the probability of a hostile takeover is zero. This reasoning leads to a curvilinear
relation between insider ownership and firm performance. In this relation, firm performance first increase then decrease as insider ownership increases. In the end, the firm’s value reaches at minimum when insider ownership reaches to 50%.

Later, (McConnell and Servaes, 1990) investigated the relationship between Tobin’s Q and the structure of equity ownership for a sample of 1,173 firms for 1976 and 1,093 firms for 1986. A significant curvilinear relation between Tobin’s Q and the fraction of common stock owned by corporate insider was reported. The curve slopes upward until insider ownership reaches approximately 40% to 50% and then slopes downward, which is consistent with the hypothesis of entrenchment. Furthermore, (Han and Suk, 1998) examined the non-linear relationship between insider ownership of 301 firms and average stock returns during 1988 to 1992. To capture the potential of the non-linear relationship, the insider ownership and insider ownership squared variables are used. The insider ownership consists of not only the board members, but also the officers, beneficial owners and principal stock holders owning ten percent or more of the firm’s stock. The results show that the insider ownership is positively related to the stock returns whereas the insider ownership square is negatively related. The results concluded that as insider ownership increases, stock returns also increase however, excessive insider ownership rather hurts corporate performance.

To study the same issue in a different market, (Short and Keasy, 1999) have chosen a sample 225 UK based firms quoted on the official list of the London Stock Exchange for the period 1988-99. The empirical results of the regression, confirm that UK management becomes entrenched at higher levels of ownership than their US counterparts. Moreover, the results from extending the analysis to consider different measures of firm performance and a more generalized form of the relationship confirm the general finding of the US literature of a non-linear relationship between firm performance and managerial ownership.

Recently, (Beiner et al., 2006) examined the relationship between insider ownership and firm value with cross-sectional data of 109 Swiss firms in 2002. The results of OLS and 3SLS regression revealed a curvilinear relationship between shareholdings of officers & directors and firm valuation, i.e., higher managerial shareholdings are associated with higher firm valuation up to some point (even in the presence of alternative corporate governance mechanisms). The negative effect on firm value for levels of insider shareholding beyond this point might be explained by managerial entrenchment (for example, managers controlling a substantial fraction of the firm’s equity may have enough voting power and/or influence to guarantee their employment and attractive salaries).

However, the same issue was taken up by (Cheung and Wei, 2006) who examined the relationship between insider ownership and corporate performance by using the data of 1430 US firms for the period of 1991-2000. The regression results of the study are consistent with many earlier studies that there is no relationship between insider holding and firm performance.

3. Research Design

A large number of studies in literature have analyzed the relationship between insider ownership and firm performance from different angles. However, the most recent dimension is non-linear relationship between the insider ownership and firm performance (Beiner et al., 2006; Short and Keasy, 1999). In the light of the existing literature, the present study attempts to explore the nature of relationship (linear or nonlinear) between the insider ownership and firm performance and provides the empirical support to “convergence of interest” or “ownership entrenchment” theory(ies) from an emerging economy of Pakistan. To validate the non-linear relationship between ownership structure and firm performance in the context of Pakistan, current study has adopted the (Short and Keasy’s, 1999) cubic form model given below:

\[ \text{Performance} = a + \beta_1 \text{Own} + \beta_2 \text{Own}^2 + \beta_3 \text{Own}^3 + \gamma \text{Control Variables} \]  \( (3.1) \)

The variables of Own and Own\(^3\) are defined as the square and the cube, respectively, of the percentage of shares held by the respective group, are used to capture this non-linear relationship. To be consistent with the non-linear relationship estimated by the previous studies, such as (Short and Keasy, 1999), the estimated coefficients for the Own and Own\(^3\) variables should be positive, and that of the Own\(^3\) variable should be negative.

On the basis of above model and objectives of present study the following two types of the equations have been formulated to test the non-linear as well as linear relationship between insider ownership structure and firm performance. Two control variables, firm size and debt have also been used to validate the results in their presence besides the variables of insider ownership and performance.

Non-linear relationship between insider ownership and Firm Performance for company \( i \) and year \( t \) can be expressed as:

(a) \[ \text{ROA} = \beta_0 + \beta_1 \text{Insider}_{it} + \beta_2 \text{Debt}_{it} + \beta_3 \text{Size}_{it} + \epsilon_{it} \] \( (3.2) \)

(b) \[ \text{Tobin’s Q} = \beta_0 + \beta_1 \text{Insider}_{it} + \beta_2 \text{Debt}_{it} + \beta_3 \text{Size}_{it} + \epsilon_{it} \] \( (3.3) \)

Linear relationship between insider ownership and Firm Performance for company \( i \) and year \( t \) can be expressed as:

(a) \[ \text{ROA} = \beta_0 + \beta_1 \text{Insider}_{it} + \beta_2 \text{Debt}_{it} + \beta_3 \text{Size}_{it} + \epsilon_{it} \] \( (3.4) \)
(b) Tobin’s Q = β0 + β1 Insideri,t + β2 Debti,t + β3 Sizei,t + εi,t

Where,

β0 = Intercept

Insideri,t = Fraction of shares owned by Board of Directors (BOD) and employees of company i for year t

Insideri,t−1 = Square of fraction of shares owned by BOD and employees of company i for year t

Insideri,t−2 = Cube of fraction of shares owned by BOD and employees of company i for year t

DEBTi,t = Ratio of total liabilities to total assets in company i for year t

SIZEi,t = Log of total assets held by company i for year t

εi,t = Error term

The most frequently used performance variables in literature are Return on Assets (ROA) and Tobin’s Q. Although (Demsetz and Lehn, 1985) study used accounting profit rate to measure firm performance whereas most of the empirical studies used the Tobin’s Q. These two performance variables differ on two important aspects. On the one hand, is the time perspective, where accounting profits are taken as backward looking whereas the Tobin’s Q is assumed to be forward-looking. In an attempt to assess the effect of ownership structure on firm performance, is it more sensible to look at an estimate of what management has accomplished or at an estimate of what management will accomplish? On the other hand, second difference is, in measuring performance. For the accounting profit rate, this is the accountant constrained by standards set by the professional body(ies). Whereas, for Tobin’s Q, this is primarily the community of investors constrained by their acumen, optimism, or pessimism. The proclivity of economists, most of whom have a better understanding of market constraints than of accounting constraints, favor Q. Accounting profit rate is not affected by the psychology of investors, and it only partially involves estimates of future events, mainly in the valuations of goodwill and depreciation. Tobin’s Q, however, is buffeted by investor psychology pertaining to forecasts of a multitude of world events that include the outcomes of present business strategies. Since, both of the performance variables carry their own bag of advantages and disadvantages, therefore, both the variables have been used in this study. The institutional shareholding will be measured by the fraction of total shares owned by the financial institutions at the end of the respective accounting year.

3.1 Sample Description

The following criteria have been used while selecting the firms for study during the period 2002-05.

1. Firm should be in profit for the whole window period
2. Listed at Karachi Stock exchange (KSE) for the whole window period.
3. It should not be a SOE (State Owned Enterprises).

As per the above criteria only 310 firms qualified as the population of the study out of 736 listed companies at Karachi Stock exchange and a sample of 100 firms has been taken through systematic random sampling method. The insider ownership is the shareholding of board of directors & their spouses, company executives & their spouses and employees. The descriptive statistics of insider ownership in selected sample across different industrial sectors has been reported in Table 3.1. The maximum holding of insider is in Auto and Allied Engineering sector which is 93.22 percent for the year 2005, whereas, the minimum holding is in Non-Banking Financial Institutions (NBFIs) which is very low of just 0.02 percent. On the average, there is 53.44 percent insider ownership in selected sample for the year 2005. However, the lowest mean insider holding of 44.80 percent is for NBFIs and highest is for the Pharmaceutical industry with 68.92 percent. For the rest of the sectors, five sectors have mean insider ownership above the sample mean and six below the sample mean. Which shows a good spread in the data to produce more reliable results for statistical estimation from regression analysis.

The descriptive statistics of Table 1 reflect that in case of Pakistan majority of the shareholdings are with board of directors, company executives and their spouses. Most of the businesses are owned by few big business families. Family firms are a fundamental and intrinsic feature of the Pakistani economy. Approximately 80% of all listed companies on the Karachi Stock Exchange have family involvement or are indirectly affiliated to a large business family (Zaidi, 2005). These family firms were established traders in different parts of united India, and it was a historical accident that gave them the opportunity to establish themselves in new land of Pakistan. Post privatization era in Pakistan also brought a new class of industrial and family businesses. Pre-nationalization (pre 1973) business families like Adamjees, Habibs or Valikas were so adversely affected that they never really invested in businesses in Pakistan. At the same time privatization and liberalization of the economy during the last 20 years have mostly helped textile tycoons to venture into other sectors which include Dewans, Mansha, Sherais, Elahis, Munoos etc. (Shahudin, 2007). Due to this fact, there is a lot of cross ownership in family firms and it has increased the ratio of insider ownership across the whole economy of Pakistan.
4. Statistical Analysis

As per the empirical literature there can be three types of relations between insider ownership and firm performance. The first one can be the “convergence of interest” that is formed when agency problem is resolved by convergence of agents as a principal of the organization in the form of stock ownership. It mostly results in positive relationship between insider ownership and firm performance (Jensen and Meckling, 1976; Chen et al., 2003; Lemmon and Lins, 2003). The second type can be the “entrenchment” which may produce positive as well as negative relationship between insider ownership and firm performance. It may be positive in the beginning when insiders have a lower level of ownership so they will work hard with other shareholders to maximize the shareholder’s wealth. However, when they will have controlling shares in any firm that may result in negative relationship with firm performance. In this situation, they feel no check and balance on them and they may work for their own interests instead of firm interest. Both of these relationships have been discussed by (Morck et al., 1988), (McConnell and Servaes, 1990) and (Beiner et al., 2006) while predicting a positive or negative relationship between firm value and size of insider holdings, depending on the ownership range. Managerial stock ownership can be the basis of a convergence-of-interests with a positive effect on firm value, although large managerial ownership can provide necessary control to the manager to carry on the non-value maximizing behavior.

However, many researchers do not agree with the notion that the ownership structure has a relationship with firm performance. According to (Demsetz, 1983), there is no cross-sectional relationship between firm value and concentration of insider or external ownership, since the ownership structure that “emerges is an endogenous outcome of competitive selection in which various cost advantages and disadvantages are balanced to arrive at an equilibrium of the firm.” Consequently, shareholder wealth maximization may require a diffused external ownership structure in one case, while a large outside equity block is optimal in the case of another firm. Similarly, one cannot infer differences in share values from differences in sizes of insider stakes across firms. Supporting this view, (Demsetz and Lehn, 1985) and (Demsetz and Villalonga, 2001) find no relationship between the accounting profit rate and different measures of ownership concentration for a sample of U.S. firms.

The present study has used different combinations of models of existing literature to validate the nature of relationship between performance variables and insider ownership variables. Insider ownership in Pakistan is higher than average insider ownership of all board members in other countries such as Malaysia, USA and UK. Average insider ownership in Pakistan is 53.22 percent while it is 32.70 percent in Malaysia. (Davies et al., 2005) and (Short and Keasey, 1999) report a value of around 13% for the UK. (Morck et al., 1988) and (McConnell and Servaes, 1990) report slightly lower levels of insider ownership for US firms compared to UK levels. Average Tobin’s Q in Pakistan is lower compared to the values reported for the USA and the UK. In Pakistan, mean Tobin’s Q of 1.53 is lower than 1.96 reported by (Davies et al., 2005) for the USA and the UK. In Pakistan, mean Tobin’s Q of 1.53 is lower than 1.96 reported by (Davies et al., 2005) for the USA and the UK. As expected the mean market capitalization of companies in Pakistan is much smaller than that of the US and UK companies.

The results of regression analysis based on equations 3.2 and 3.3 to validate the non-linear relationship between insider ownership and firm performance are reported in Table 2. As per the results in the table, all three variables of insider ownership could not establish any statistically significant relationship with both the performance variables of ROA and Tobin’s Q. To establish the non-linear relationship, equation 3.2 and 3.3 should have produced positive signs for the estimated coefficients of INSIDER and INSIDER2, whereas estimated parameter of INSIDER2 should have a negative sign.

Table 1. Pattern of Insider Ownership in Different Industries of Pakistan for the Year 2005

<table>
<thead>
<tr>
<th>Name of Industry</th>
<th>Mean</th>
<th>Maximum Holding</th>
<th>Minimum Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto and Allied Engineering</td>
<td>57.75</td>
<td>93.22</td>
<td>3.25</td>
</tr>
<tr>
<td>Banking Institutions</td>
<td>48.82</td>
<td>65.80</td>
<td>10.50</td>
</tr>
<tr>
<td>Cement</td>
<td>46.50</td>
<td>85.12</td>
<td>22.04</td>
</tr>
<tr>
<td>Chemical and Allied</td>
<td>57.82</td>
<td>76.45</td>
<td>48.86</td>
</tr>
<tr>
<td>Food and Allied</td>
<td>49.11</td>
<td>82.53</td>
<td>11.01</td>
</tr>
<tr>
<td>Non-Banking Financial Institutions</td>
<td>44.80</td>
<td>70.10</td>
<td>0.02</td>
</tr>
<tr>
<td>Oil and Energy</td>
<td>62.98</td>
<td>69.41</td>
<td>61.30</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>68.92</td>
<td>79.21</td>
<td>40.53</td>
</tr>
<tr>
<td>Sugar</td>
<td>46.87</td>
<td>66.34</td>
<td>32.03</td>
</tr>
<tr>
<td>Textiles</td>
<td>56.70</td>
<td>75.72</td>
<td>27.41</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>47.56</td>
<td>71.30</td>
<td>23.44</td>
</tr>
<tr>
<td>Total</td>
<td>53.44</td>
<td>93.22</td>
<td>0.02</td>
</tr>
</tbody>
</table>

93
of ROA, these signs were not as expected. Moreover, none of the estimated parameter was statistical significance which did not confirm the entrenchment theory of (Morck et al., 1988), (McConnell and Servaes 1990), and (Beiner et al., 2006). Therefore, the notion of non-linear relationship between insider ownership and firm performance does not seem valid in case of Pakistan. As far as the control variables are concerned the negative impact of debt on firm performance is statistically significant similar to earlier studies but size as a variable could not show any significant relationship with performance.

Table 2. Relationship between Insider Ownership and Firm Performance (For Non-linear Equation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>ROA</th>
<th>Tobin’s q</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t-Statistics</td>
<td>Sig.</td>
</tr>
<tr>
<td>INTERCEPT</td>
<td>4.185*</td>
<td>.000</td>
</tr>
<tr>
<td>INSIDER</td>
<td>-2.41</td>
<td>.000</td>
</tr>
<tr>
<td>INSIDER&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.073</td>
<td>.942</td>
</tr>
<tr>
<td>INSIDER&lt;sup&gt;3&lt;/sup&gt;</td>
<td>.198</td>
<td>.843</td>
</tr>
<tr>
<td>DEBT</td>
<td>-7.555*</td>
<td>.000</td>
</tr>
<tr>
<td>SIZE</td>
<td>.719</td>
<td>.474</td>
</tr>
<tr>
<td>ADF-R-SQUAR</td>
<td>.107</td>
<td>.130</td>
</tr>
<tr>
<td>N</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>D/W</td>
<td>1.803</td>
<td>1.934</td>
</tr>
</tbody>
</table>

*significant at level of 1%  ** significant at level of 10%

Equations 3.4 and 3.5 are estimated to assess the linear relationship between variable of insider ownership and performance variables of ROA and Tobin’s Q with two control variables of Debt and size. The cross-sectional regression results of these equations are reported in Table 4.2. As per these results, there is a statistically significant relationship between insider ownership variable and performance variables of ROA and Tobin’s Q at 10 % level. These results have supported the notion that a positive relationship exists between insider ownership and firm performance in emerging economy of Pakistan. In line with the previous empirical investigations, the debt has a significant negative relationship with performance whereas, the relationship between size and performance variable of ROA and Tobin’s Q is positive but not statistically significant._

The results of Table 4.1 and 4.2 are consistent with (Jensen and Meckling 1976), (Chen et al., 2003) and (Davies et al., 2005) that the insider ownership and corporate performance are co-deterministic. However, these findings are in contrast to (Demsetz and Lehn, 1985), and (Demsetz and Villalonga, 2000) who find no relationship between insider ownership and firm performance. In summary, the above results have supported the view point of “convergence of interest” that there is a strong positive linear relationship between insider ownership and firm performance in the emerging economy of Pakistan.

5. Conclusion

The motivation of the current study stemmed from lack of empirical and theoretical investigations regarding the impact of insider ownership on firm performance for an emerging economy of Pakistan. It examined whether the variation in ownership structure across firms results in systematic variations in the performance of these firms listed at Karachi Stock Exchange. The cross sectional regression has been applied to find the impact of ownership structure on the performance of selected 97 Pakistani firms.

The results of the empirical analysis, indicated a statistically significant positive and linear relationship between insider ownership and firm performance which supports the “converge of interest” theory of insider ownership and firm performance. These results are consistent with those of (Chen et al., 2003) and (Davies et al., 2005), who found that insider ownership and corporate performance are co-deterministic. However, the estimated result did not match with the “entrenchment theory” by (Morck et al., 1988), (McConnell and Servaes, 1990), and (Beiner et al., 2006). Moreover, these findings are in contrast with (Demsetz and Lehn, 1985), and (Demsetz and Villalonga, 2001) who found no
relationship between insider ownership and firm performance. In summary, the above results have validated that there is a strong positive linear relationship between insider ownership and firm performance in the context of the emerging economy of Pakistan. Moreover, debt appeared to have a negative and linear relationship with firm performance, consistent to most of the previous studies, indicating that higher level of debt increases interest and financial charges which leads to lower earnings or returns. However, the firm’s size variable has a positive but statically insignificant relationship between the firm’s size and performance indicating that large size firms may perform better than smaller size firms. The above results indicate that in case of the emerging economy of Pakistan, the relationship between the insider ownership and firm performance is consistent with the theory “convergence of interest” rather than the theory “ownership entrenchment” that have proved true in many developed economies. In spite of entirely different characteristics of data, estimated result have supported a strong positive relationship between insider ownership and firm performance. As shown in table 3.1, that most of the Pakistani firms have is also shown concentrated ownership, which means they are efficiently managed and may perform better in future. The policy implication is that the agency problems in Pakistan can be solved by offering the stock options to the employees as there are many successful examples of good governance/management by employees in post privatization era of many state owned enterprises in Pakistan, for examples, Allied Bank Limited and Engro Chemicals Limited.

References