Ownership Concentration and Firm Performance: A Case of Non-financial Sector Family Firms in Pakistan

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ABSTRACT

The present examined the effect of ownership concentration on family firms’ performance in Pakistan. The performance measures included both accounting and market performance variables. The estimation technique employed in the study was Generalized Method of Moments. The findings clearly indicate that concentrated ownership is harmful for family firms’ performance. Although, the results are contradictory to previous studies in Pakistani context, these were consistent with the entrenchment effect. The results suggest that dominant family shareholders are forceful and they are engaged in tunneling firms’ resources for their personal gains at the costs of external shareholders that is detrimental for firms’ performance.

Keywords: Entrenchment Effect, Family Firms, Ownership Concentration, Return on Equity

Introduction

The riddle of ownership concentration-firm performance (OWNCON-PER) relationship is unresolved and hot ever since the argument of positive relationship between the two variables was propounded by Berle and Means (1932). Their seminal work opened spillways of research in the area in many dimensions. Subsequent studies tend to explore the relationship in the presence of many control variables, for samples of various traits and for a variety of estimation techniques. Despite a rich literature, no conclusive relationship has been established and mixed results are reported by various studies. Each class of research has a theoretical justification for the coined results which follows next. Since large shareholders are in a better position to monitor management (Shleifer & Vishny, 1986), in the presence of concentrated ownership, management is susceptible to high degree of accountability,
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in case their decisions are not aligned with the interests of large shareholders (Mangena et al., 2012, Munisi et al 2014).

At the same time, large shareholders’ monitoring role restricts managers to pursue their interests at the expense of shareholders (Mangena et al., 2012). In this scenario, a positive relationship between OWNCON and PER is justified on theoretical grounds. This is particularly important in emerging countries where governance failures prevail and concentrated ownership substitute for these missing efficient markets mechanism (Javed & Iqbal, 2008). Conversely, if the managements’ monitoring mechanism fails, the opportunistic behavior of the large shareholders (generally referred as expropriation effect) induces them to extract private benefits at the cost of dominated class of shareholders, which ultimately lead to poor instead of better firm performance (La Porta et al., 1999; Shleifer & Vishny, 1986; Young et al, 2008; Filatotchev et al., 2013; Wang & Shailer, 2015). A third scenario occurs when none of the above mechanism exists or the opposing forces nullify each other, yielding insignificant results (Chalaki & Tanideh 2010; Huan et al. 2014).

The conflicting results reported by various studies motivate the researchers to explore the relationship in numerous dimensions. The researcher in all economies-advanced, emerging and developing-are engaged in discovering newer aspects, using multiple variations in the sample, however, main focus has been on extending the sample size, or using various measures of performance (market-based or accounting based) or ownership concentration (largest three, largest five or Herfindahl-Hirschman Index etc.). There is a dire need to focus sample frame and conduct analysis on firms that need to be studied separately. Since firms reveal different economic behaviors based on varying governance mechanism, firms operating under common umbrella-the family firms, are expected to observe a distinct behavior in respect of OWNCON and PER relation. Considering the significance of the sample and the existing gap in literature, this study attempts to find the nature of association between OWNCON and PER. The present study examines the OWNCON-PER relationships on a sample of family firms in Pakistan.

Literature Review

Literature on the examining of OWNCON-PER relationships can be classified into three streams, irrespective of the division with regard to economic development. The first stream of studies found positive relation and the results were reinforcing for various economies and after controlling for a number of variables. The second class of studies reported contrasting results and found an inverse association between the two variables. The third category did not find evidence in support of either of the two classes and reported insignificant results. A brief review of the existing literature belonging all the three categories is given below.

Soliman (2013) studied the OWNCON-PER relationship for Saudi Arabian firms. The sample period covers a span of three years ending on 2008. The study observed a positive relationship between the two stating that an increased OC is
coupled with an enhancement of firms' value in the sample firms. However, the relationship is not linear. Kalezić (2015) observed positive effect of ROE on the PER of firms in Montenegro suggesting that dominant shareholders are helpful in monitoring of managers and thus led to enhanced PER.

Taking 52 firms that were recently privatized during 1995-2005 in Egypt, Omran (2009) observed positive OC-ROE link. Similar findings were reported in the study of Manawaduge and Zoysa (2013) in Sri Lanka. Further, the research of Pathirawasam & Wickremasinghe (2012) confirmed the positive OC-ROA relationships.

The study of Vito and Laurin (2010) discovered the OWNCON-PER linkage in different perspective. OWNCON was negatively related with R & D whereas R & D was positively associated with Tobing. The researcher concluded that OWNCON resulted in lowering PER as it caused decrease in R & D that had an ultimate positive effect on PER in Canada. Arosa et al. (2010) examined ownership concentration-performance relationship in different perspective on a data of 586 companies in Spain. They focused the varying behavior of conflicts among the controlling and external shareholders in family & non-family companies. They concluded that OWNCON-PER relationships differ conditional on the generation of the controlling shareholders in the family companies. The findings revealed that the traditional manager-owner conflicts are alleviated in the first generation of family companies because of the monitoring benefits of the dominant shareholders and however, these shareholders are engaged in tunneling firms' resources for their personal benefit at the external shareholders’ costs.

There are also few evidences for the negative OWNCON-PER linkage. Lehmann and Weigand (2000) observed that OWNCON is negatively related with the PER of companies in Germany. The research of Kahn and Winton (2002) revealed negative effect on the PER. Similarly Chen et al. (2005) fail to find a positive relation between concentrated family ownership and PER on a data of 412 listed firms covering 1995-1998 period in Hong Kong. Ongore (2011) suggest that OWNCON is negatively with PER of firms measured by ROA, ROE & Dividend Yield. Huan et al. (2014) take 94 listed firms for a period of 2011-2013 in Malaysia. They use Tobin’s Q as performance measure and observed insignificant OWNCON-PER relationship. Chalaki & Tanideh (2010) examined the OWNCON-PER relation by employing a data of 120 companies and found insignificant link. A number of researcher for instance Demsetz & Lehn (1985), Cho (1998), Demsetz & Villalonga (2001), Loderer & Martin (1997), Hermalin & Weisbach (1991) addressed issue of endogeneity and employ simultaneous equations estimation models and however, they found insignificant OWNCON-PER relationships.

Jadoon and Bajoori (2015) employs a sample of 262 non-financial firms listed on Karachi Stock exchange for a period of 2006-2011. They measure ownership concentration by three measures including shareholding of largest shareholder,
shareholding of largest 5 shareholders and shareholding of largest 10 shareholders. Firms’ performance is measured by ROA, ROE & Tobinq. The findings reveal that ownership concentration improves firms’ performance in Pakistan. Din & Javid (2011) took 29 PSX listed firms for 2004-2009 and observed positive relation of family concentrated shareholdings with ROA, ROE & Tobinq. Taking 177 companies listed on PSX covering 2004 – 2014 periods, Khan and Nouman (2017) suggested positive effect of concentrated shareholdings on both variables of return on assets and Tobinq.

**Hypothesis A**: Ownership concentration is significantly positively related with firm performance.

**Hypothesis B**: Ownership concentration is significantly negatively related with firm performance.

**Material and Methods**

A sample of 150 family firms of non-financial sector covering a period of 2008-2016 is employed in this study. The estimation is done using Generalized Method of Moments. This technique is used in order to avoid the endogeneity problems associated with the data.

**Results and Discussion**

The summary statistics of the dataset used for analysis purpose is given below in Table 1 which provides an overview of the variables included in the model along with their mean values, standard deviations, maximum and minimum value. Mean (median) values of ROA, ROS & ROE are 0.037 (0.032), 0.008 (0.029), 0.052 (0.092) respectively. Similarly, mean (median) values of Tobinq are 0.979 (0.884). Further, mean (median) values of OC are 0.591 (0.572) that shows that ownership is concentrated in family firms of Pakistan. These statistics of ownership concentration are consistent with the findings of Claessens et al. (2000).

| Variable | Mean (median) |
|----------|---------------|
| ROA      | 0.037 (0.032) |
| ROS      | 0.008 (0.029) |
| ROE      | 0.052 (0.092) |
| Tobinq   | 0.979 (0.884) |

**Table 1**

| Variable | Mean (median) |
|----------|---------------|
| OC       | 0.591 (0.572) |
| Size     | 7.888 (7.824) |
| Leverage | 0.666 (0.637) |
| Growth   | 0.185 (0.152) |
| Leverage | 3.953 (3.953) |
| Size     | 12.244 (7.824) |
| ROA      | 0.037 (0.032) |
| ROS      | 0.008 (0.029) |
| ROE      | 0.052 (0.092) |
| Tobinq   | 0.979 (0.884) |

ROA is calculated as dividing the net profits before tax by total assets of the firm. ROS is found by dividing the net profits divided by total sales & ROE is obtained as dividing the net profits by shareholders’ equity. Tobinq is the sum of market value of equity plus book value of debt divided by firms’ total assets. OC
represents shareholdings of the largest 3 shareholders. Firm size is measured as natural logarithm of total assets. Leverage is obtained by dividing the total debts by total assets and growth variable is found by taking change in sales with respect to previous year.

Next follows the correlation matrix reported in Table 2 reflecting the degree of correlation present between variables used in the model. A correlation matrix is good to sense multicollinearity between regressors which usually exists when there happens to be a high correlation between independent variables. It can be observed that the correlation coefficients are in the acceptable limits and the model should not be prone to the problem of multicollinearity.

### Table 2

| Growth | Leverage | Size | OC   | Tobinq | ROE  | ROS  | ROA  | Variable |
|--------|----------|------|------|--------|------|------|------|----------|
| 0.224  | -0.069   | -0.163 | -0.138 | 1      | 0.021 | 0.001 | -0.021 | Growth   |
| -0.024 | -0.439   | 0.032 | 0.000 | 0.000  | 0.495 | 0.918 | 0.487 | Leverage |
| 1      | 0.214    | 0.298 | 0.214 | 0.214  | 0.415 | 0.075 | 0.000 | ROE      |
| 0.052  | 0.053    | 0.144 | 0.052 | 0.052  | 0.599 | -0.020 | -0.223 | ROE      |
| 0.025  | 0.057    | 0.130 | 0.130 | 0.130  | 0.099 | -0.020 | -0.223 | ROE      |
| 0.025  | 0.057    | 0.130 | 0.130 | 0.130  | 0.099 | -0.020 | -0.223 | ROE      |
| 0.021  | 0.001    | 0.000 | 0.000 | 0.000  | 0.000 | 0.000 | 0.000 | Size     |
| -0.101 | 0.021    | 0.000 | 0.000 | 0.000  | 0.000 | 0.000 | 0.000 | Size     |
| 1      | 0.742    | 0.000 | 0.000 | 0.000  | 0.000 | 0.000 | 0.000 | ROA      |
| 0.495  | 0.918    | 0.487 | 0.236 | 0.000  | 0.000 | 0.000 | 0.000 | Variable |

### Correlation

Another measure to assess potential problem of multicollinearity is variance inflation factor (VIF) which estimates the degree of influence in one regressor by the interaction/correlation of another regressor. Table 3 provided a summary of the VIF. To econometricians, if the value of VIF exceeds 10, there exists a high degree of multicollinearity. It can, however, be observed that the values are around 1, thus signaling green to proceed for the regressions.
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Table 3 VIF

| Variable | Coefficient | VIF  |
|----------|-------------|------|
| OC       | 0.000       | 1.016|
| Size     | 0.000       | 1.015|
| Leverage | 0.000       | 1.010|
| Growth   | 0.000       | 1.001|
| Intercept| 0.001       | NA   |

Table 4 has reported the regression results using GMM. OC is consistently negatively related with all of the performance measures including ROA, ROS, ROE & Tobinqu and the results are significant at conventional levels as well. The negative effect of concentrated ownership on family firms’ performance is consistent with the expectations because the controlling family members may internalize the controlling benefits with the dominant shareholders and often are engaged in tunneling that is detrimental for firm performance (Lehmann & Weigand, 2000; Kahn & Winton, 2002). However, the results are contradictory to earlier studies in Pakistani context for instance Din and Javid (2011), Javid and Iqbal (2008), Khan and Nouman (2017).

Table 4
GMM Regression Results

| Variable | Tobinqu | ROE | ROS | ROA      | Adjusted R-squared |
|----------|---------|-----|-----|----------|--------------------|
| OC       | -0.142**| -0.196*| -0.124***| -0.073*** |                    |
| Size     | 0.029   | 0.072 | 0.000 | 0.000    |                    |
| Leverage | 0.023** | 0.022 | 0.010**| 0.006**  |                    |
| Growth   | 0.030   | 0.121 | 0.016 | 0.047    |                    |
| Intercept| 0.927***| -0.012 | -0.099***| -0.090*** |                    |
| Grow     | -0.000  | 0.818 | 0.000 | 0.000    |                    |
| Grow     | 0.093***| 0.171***| 0.103***| 0.069*** |                    |
| Interce  | 0.005   | 0.002 | 0.000 | 0.000    |                    |
| Interce  | 0.240*  | -0.031| 0.055 | 0.080**  |                    |
| Interce  | 0.084   | 0.829 | 0.216 | 0.030    |                    |
| Interce  | 0.417   | 0.014 | 0.130 | 0.154    | Adjusted R-squared |
| Interce  | 8.676   | 4.022 | 8.742 | 12.003   | J-statistic        |
| Interce  | 0.123   | 0.546 | 0.120 | 0.103    | Prob. (J-statistic)|

Robustness Check

In order to check the robustness of the results, analyses have also been done using OLS as shown in Table 5. The results confirmed the above reported GMM estimations results. OC is consistently and significantly negative for all of the performance measures. The findings support entrenchment effect. The dominant family members are powerful and influential. They have the potential and incentives to make private benefits at the expense of external shareholders and if they opt to
exercise their tunneling power, the external shareholders discount the share prices and ultimately reducing firm value.

### Table 5

| Tobinq    | ROA  | ROS  | ROE  | Variable |
|-----------|------|------|------|----------|
| -0.178**  | -0.202* | -0.129*** | -0.073*** | OC       |
| 0.019     | 0.062  | 0.000  | 0.001 |          |
| 0.024**   | 0.022  | 0.013*** | 0.010*** | Size     |
| 0.015     | 0.126  | 0.001  | 0.001 |          |
| 0.903***  | -0.016 | -0.097*** | -0.091*** | Leverage |
| 0.000     | 0.768  | 0.000  | 0.000 |          |
| 0.076**   | 0.170*** | 0.104*** | 0.078*** | Growth   |
| 0.049     | 0.002  | 0.000  | 0.000 |          |
| 0.280***  | -0.022 | 0.028  | 0.049** | Intercept|
| 0.005     | 0.878  | 0.479  | 0.075 |          |
| 0.406     | 0.015  | 0.135  | 0.161 | Adjusted R-squared |
| 145.935*** | 4.164*** | 33.977*** | 41.750*** | F-statistic |
| 0.000     | 0.002  | 0.000  | 0.000 | Prob. (F-statistic) |

### Conclusion

In this study the explanatory power of concentrated ownership has been examined in family firms of Pakistan. The GMM has been used to examine the relationships. Firm performance measures include both accounting & market related variables. The accounting variable are ROA, ROE & ROS and the market performance measure is Tobing. The results indicate that ownership concentration is inversely related with both accounting and market performance variables. These findings suggest that concentrated shareholding is harmful for family firms’ performance in Pakistan. Although these are contradictory to earlier studies’ findings in Pakistan but are consistent with the expectations. The dominant family members are forceful and may expropriate firm’s wealth for their personal consumption in a channel that cost to minority shareholders. The results support to entrenchment effect. The research has provided empirical evidence for family firms in Pakistan and shed light for the policymakers and regulatory institutions to design and implement governance system in manner that safeguard the interests of external shareholders from the entrenched dominant shareholders in family firms. The study has been restricted to non-financial sectors’ firms and it has been directed to study the relationship by taking financial sector firms’ data.
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