Role of ownership in corporate governance and its impact on Firm performance: A case of companies listed in Pakistan Stock exchange.

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Abstract

This research examines the firm’s performance cause by ownership structure. We decompose ownership into percentage of equity hold by foreigner and directors. This study identified three commonly used measures of financial performance of firm, namely, return on equity, return on asset, and Tobin’s Q ratio. The empirical finding showed that financial performance positively caused by ownership structure and more specifically foreign equity holder has significant improvement in terms of return on asset, return on equity and Tobin’s Q ratio. On the contrary, in case of the director ownership this study concludes a negative relationship with firm’s profitability and performance (measured through return on asset and return on equity). However, the negative relationship of director equity on Tobin’s Q was not statistically significant.

Key words: Corporate Governance, Ownership structure, financial performance, foreign ownership, director ownership, return on asset, return on equity, Tobin’s Q ratio

1. Introduction

The Governance is recognized as the regulations, norms, action and manners of governing. It cannot be explained in specific terminologies. The explanation is subject to the theoretical basis which it is being studied.

According to Sheikh (1995) the system of accountability, responsibilities and duties with in the firm is known as corporate governance. An valuable corporate governance structure offers the mechanism of regulating the corporate bodies. Good corporate governance consists of a structure of organizing, functioning and governing a firm in order to attain the best performance. The process of controlling, directing and evaluating the organization is defined by corporate governance (Colley, Doyle, Logan, & Stettinius, 1992). The corporate governance is the arrangement of the system where investor make assure for generating profit on their venture in businesses (Shleifer &Vishny, 1997). The corporate governance determines the moralities and duties of the board, managements, shareholders and stakeholders, it demonstrates the rules and procedure and measure of performance (OECD, 1999).

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1.1 Corporate Ownership and Shareholder

The perception about corporate ownership is a firm's owned by someone or a group, who possesses the right to control the firm. Whenever the entrepreneurs could not provide the finance, the firm issue shares in order to raise the necessary capital. In context of corporate sector, shares are defined as companies’ equity. Pattern explains the fraction of a corporate equity held by a person or group in the market that make its owners. According to the Solomon (2007) firm’s ownership structure depends on the way in which firms are financed. According to Grob (2007) ownership concentration provides the numerical evidence of equity size.

1.2 Ownership structure

The structure of the firm’s ownership represents a mechanism to condense the agency costs derived from the coalition of interests between equity holders and directors. It is also used to protect property rights, constituting an important element for the design of good governance mechanisms (Li, Song, & Wu, 2015). This is a very important aspect for the company, insofar as it will directly influence the decision-making process. The dimensions are different through which the ownership structure of the company can be studied. Specifically, the literature considers that this will depend on the concentration of ownership, the shareholding of board members and managers, as well as the institutional participation in it (Aguilera & Crespi-Cladera, 2016).

1.2.1 Foreign participation in ownership of the company

The one of the most imperative component of firm’s ownership in many emerging countries is foreign ownership. Foreign equity holder has a substantial role in the overall corporate governance. Foreign investors are the primary and most powerful stakeholder for any organization. They bring in huge investment therefore they are likely to have adequate measures to protect their investment. Corporate governance mechanisms as discussed in various dimensions can be used by foreign investors as tools to affect managerial behavior, corporate strategic direction, risk behavior, and other agency problems (Larcker & Tayan, 2015).

1.3 Corporate governance and Ownership structure in Pakistan

Corporate governance, after the formation of the first code of corporate governance in 2002 by SECP is still in developing phase. It needs more attention and research for better governance in order to strengthen the growth process in the economy. According to ICMA (2011) the five major types of equity holders in Pakistan are Director's ownership, General Public ownership, associated companies' ownership, Institutional ownership and foreign ownership.

There are three forms of shareholder dominant in the corporate sector of Pakistan. The first one is public sector where most of the firm's equity possessed by the government. The next category is the Pakistani business groups, where family owned large numbers of the firm's shares. The third classification
includes multinational companies where the foreign parent business group is the leading shareholder (Cheema, Bari, & Saddique, 2003). Chaudary, Goergen, Syed and Burki (2006) explained the order of ownership pattern according to the rate of market capitalization. The most important sort of share owned is government, then families and lastly multinational companies. The aim of all these forms of ownership patterns is to build a balanced system of governance, stakeholders and financial performance.

1.5 Problem Statement

It has been widely discussed that the relationship of family owned and government owned shares on accounting performance in Pakistan. There have been few of researches concentrated on the foreign owned segment of the firm’s shares. So, there appears a noticeable gap in understanding the foreign ownership for financial performance of companies listed in Pakistan stock exchange. This research efforts to fill the gap in the present works and examines the importance of foreign equity ownership in firm’s performance in the Pakistani context.

There are two conflicting assumptions regarding the role of ownership in corporate governance. First predict that, foreign owned companies have better technology and capital since they are more productive and perform better than local companies (Geothal & Ooghe, 1997). Lean (2008) explained that only in the presence of skilled labor force, foreign direct investment can impact positively on the host country. The instantaneous outcome of foreign equity ownership on performance has been to lift up opportunity about future firm performance, (Naka & Nguyen, 2013).

However, some different analyst’s findings contradict the perception, Barbosa, & Louri (2005) challenges the general concept about foreign ownership and did not find the significant evidence of difference in performance with respect of performance in Portugal and Greece. Herzer and Klasen (2008) correspondingly suggest that impact of foreign investment in the local capital market is insignificant. Kumar (2004) measured the influence of sort of shareholder pattern on firm performance in India and inferred foreign shareholders were not considered the influential part in corporate performance.

These two contending perspectives provide further grounds for research. This research will report the impacts of foreign proprietorship on firm’s accounting performance. We decompose the ownership into the percentages of shares held by foreigner and director.

2. Review of Literature

2.1 Ownership Structure, Corporate governance and Performance

When talking about Good Corporate Governance, reference is made to a structure capable of achieving the strategic objectives drawn up by its owners. To the extent that the best possible alignment is achieved between the Board of Directors (representative of the proprietors of the organizations), as the
case may be and the executive body (executive director, executive president or general manager, as the case may be), it will be easier to face vicissitudes beyond the control of the direction (Ellul, 2015). Ownership of the firms and their control are separate (Berle & Means, 1932). This finding serves as the theoretical foundation of study on corporate governance. Some researches support this argument; conversely some researchers propose the contradicting views. The change in firm value is caused by the investment, which is affected by managerial ownership (Jensen & Meckling, 1976). This thought changes theoretical perception of finance.

There are two broad governance strategies; organization-based strategies of corporate control and market based strategies that bring into line the different benefits of directors and shareholders (Walsh & Seward, 1990). Demsetz (1983) opposed Berle and Means (1932), and found that the value of the firm is internally originated, ownership and control are not separate. Palia (2001) find that attributes of the contracting environment and conflict between insider ownership impact the firm’s values. According to the Tam and Tan (2007), the different belief individuality and the behavior of owner shaped different style of governance. Such governance is made to affect firm’s performance. Amar and André (2006) suggest that usually large shareholder invested in less risky project or in the firm, which are in the growing phase. They explained that pattern of ownership and management inversely affects the firm’s performance.

Schiehll (2006) explores the firm performance caused by ownership pattern in the Canadian corporate sector, the findings of his research propose that majority of large outside shareholders are not associated with performance, whereas if the majority of the corporate equity held by directors having the voting rights tend to be negatively related to firm’s accounting performance.

The corporate performance is not considerably affected by the ownership structure in Bangladesh Corporate market (Farooque, van, Dunstan, & Karim, 2007). Hu, and Izumida (2008) employ Granger causality tests on panel data from 1980 through 2005 of the Tokyo Stock Exchange and recommend that intense ownership structure has the considerable effect on firm current and consequent performance.

Detthamrong, Chancharat, and Vithessonthi, (2017) analyze the non-financial Thai firms from the periods of 2001-2014. They explained that firm’s accounting performance is not affected by corporate governance. But when they categories the firms into small and large firms, they found that governance of large firms impact negatively on performance measures. Pillai, and Al-Malkawi (2018) investigated the equity market of Gulf Cooperation Board and examined the internal mechanisms of corporate governance. They suggested that governance notably affects the firm’s accounting performance in most of the countries of Gulf Cooperation Board. Firm’s life cycle is a key mechanism to understand the relationship between
ownership structure and firm performance. It is associated with different level of firm’s life cycle and different pattern of ownership. (Sridharan & Joshi 2018)

2.2 Foreign Ownership and Financial Performance

The importance of foreign ownership seems only in joint venture companies. Totally domestic owned firm’s productivity is negatively caused by foreign equity investment (Aitken & Harrison, 1999). Corporate performance is only based on skill, resources and superior monitoring; it is not affected by ownership structure (Douma, George & Kabir, 2006). Patibandla (2006) isolated foreign investment into personal foreign companies and government owned domestic financial sectors. The exact outcomes demonstrate that the expanding existence of foreign companies positively affects the performance in terms of net income. Firms that rely on government finance for the outside back show decrease in performance.

Lee (2008) analyzes the ownership structure in two different extents. He explained that firms accounting base performance positively associated with ownership concentration; this relationship is hump-shaped, in which optimal level of firm performance at equal mixture of ownership concentration but latter is offset by the negative effects. He did not find any considerable relationship between performance and foreign and institutional ownerships.

Ananchotikul (2008) challenged this standard way of thinking that foreign venture is a component for enhancing corporate administration in developing markets by using firm-level data on 365 Thai firms. He explained that sort of foreign owners do matter. When foreign industries own large numbers of shares, there is no considerable positive impact in corporate governance. In contrast, when foreign companies own small numbers of shares, it leads to positive impact on corporate governance. He further explained that impact of foreign owner on corporate governance depends on the foreign owner who comes from a particular country.

Tsegba and Ezi-Herbert (2011), suggested that firm’s accounting performance is not reasoned by leading shareholders, concentrated ownership, and foreign ownership structures. They also proposed that director’s ownership is negatively affected by the firm performance in Nigeria. Azzam, Fouad and Ghosh (2013) investigated 8,185 Egyptian companies from 2006-2010. They suggest that the initial impact of outsider Egypt the ownership is positive, but after reaching a level it inversely impacted the performance. They further point out the effect of foreign ownership is sector-specific.

Chang and Moon (2013) verified that foreign-owned domestic firms do better than the totally locally owned firms in China. They compared the performance of the locally owned firms by local firms owned by multinationals. The discriminating performance was not just because of foreign investments in equity of
Swedish firms. Foreign owner can affect the performance only if additional voting rights of domestic shareholders are gradually replaced with foreign shareholders (Kathy, Fogel, Lee & Palmberg, 2013).

Opposing to most of the previous findings Phung, & Le, (2013) concluded that if the firm’s equity owned by foreigners then it have an negative effect on the performance. They reveal that in Vietnam, foreign ownership are dispersed and they have asymmetric information. So, they have no monitoring role in corporate governance mechanism.

Greenaway, Guariglia and Yu (2014) examined the 21,582 Chinese firms from 2000 to 2005, they considered “the returns on assets and sales, labor productivity, and TFP” as measure of firm financial performance and suggested that joint-venture firms achieving high-performance in Chinese market. They found a concave relationship between foreign owners and firms’ performance. Firms’ performance increases as foreign equity holders rises from 47% to 64%and declines subsequently, to ensure the optimal performance there should be certain level of joint-ventures of foreign and domestic shareholders. Mishra (2014) investigated that whether the variation in equity ownership affects the firms value in Australia. He used percentage of shares (controlling share ownership not available to ordinary investors) owned by a foreign institution, other local companies, as measure of ownership. He found that when foreign investors invest more in local Australian firms, its value increases.

Phung and Mishra (2016) explained that the government ownership initially slow down the firm’s performance but consequently it improves, whereas foreign ownership initially increases the level of performance, then decreases. They explained that increase in number of foreign shareholding in Vietnamese listed firms may bring administrative and technological skill, which lead to initially positive impact on its performance.

Peck-Ling, Nai-Chiek, and Chee-Seong (2016) used the sample of 348 listed firms of Malaysia from the year 1999 to 2010 and explained that when foreign investor have dominating voting rights then it positively affects the firms performance. They found that if the foreign investor has more than 50 percent equity ownership then it significantly increases the firm’s profitability in Malaysia. Bhat (2017) investigated Indian firm’s performance affected by foreign equity ownership. He sorts the foreign equity ownership into three levels: less than 25%, 25%-50%, more than 50%. He explained that firms having foreign equity ownership invest more in research and development, and focus on efficient business models, that help to control operating expense. His finding indicates that because of reduction in cost of goods sold firm’s profitability tends to improve over the years. He uses return on sale as measure of profitability.

Beatson& Chen (2018) used fixed effect model by employing quarterly data and suggested that firm’s performance is positively associated by its leading shares held by qualified foreign institution in of
Chinese listed non-financial firms. Alabdullah (2018) categorizes the ownership structure into administrative and foreign ownership and shown that administrative ownership has a positive impact on performance. The outcomes unexpectedly failed to provide the confirmation about any association of performance and the presence of foreign equity holder.

2.3 Managerial ownership and financial performance

Abdallah & Ismail, (2017) studied when the firm’s equity held by the managers, concluding that the firm’s accounting performance rises, when the ownership percentages are between 0% and 5%, decreases the ratio when they are between 5% and 25% and increases when it is greater than 25%. Following the previous authors, Al-Bassam, et al., (2018) find a positive relationship for property percentages lower than 5%, but, unlike the former, they do not find a statistically significant relationship for percentages higher than 5%.

Fahlenbrach and Stulz (2009) investigated the American firms from 1988 to 2003 and explained the dynamic impact of managerial ownership and found that if the firm’s top management owns more equity, then its impact positively on firm’s value and increases its Tobin’s Q ratio, whereas director shareholding could not significantly enhance the firm’s value.

Arshad and Javid (2014) categorize the managerial ownership into three levels according to the percentage (0-10, 10-25 and >25) of equity owned by inside management. Firm’s overall inside management fails to significantly impact on all performance measure on a sample of 140 Pakistani firms from the period of 2003 to 2011. This is because of Pakistan’s corporate culture, where most of the firms owned by family and key managerial posts assign to the family members, they are incapable to significantly enhance the performance. When they segregated into different levels, they found significant positive impact, if management own 0-25 percent of firm’s equity.

Kunst and Beugelsdijk (2018) provide the empirical result by taking the worldwide sample of 27,852 listed companies in 123 different countries. They related the association between ownership structure and performance with cultural boundaries and found that only in Anglo-Saxon model firms performed better if agent owns more equity.
2.4 Conceptual Framework

2.5 Hypothesis

H₁: There is impact of foreign ownership on return on asset (ROA) without time effect.

H₂: There is impact of director ownership on return on asset (ROA) without time effect

H₃: There is impact of foreign ownership on return on Equity (ROE) without time effect.

H₄: There is impact of director ownership on return on Equity (ROE) without time effect.

H₅: There is impact of foreign ownership on Tobin’s Q without time effect.

H₆: There is impact of director ownership on Tobin’s Q without time effect.

H₇: There is impact of foreign ownership on return on asset (ROA) with time effect.

H₈: There is impact of director ownership on return on asset (ROA) with time effect

H₉: There is impact of foreign ownership on return on Equity (ROE) with time effect.

H₁₀: There is impact of director ownership on return on Equity (ROE) with time effect.

H₁₁: There is impact of foreign ownership on Tobin’s Q with time effect.

H₁₂: There is impact of director ownership on Tobin’s Q with time effect
3. Methodology

3.1 Universe, Target Population and Sampling

The target population of this research is all companies listed in Pakistan Stock Exchange. Our sample consists of 192 companies, out of which 96 companies have foreign ownership. This research uses the financial data provided by companies from the period of 2006 to 2016, so the research is based on secondary data. The sample of this research initially covered all the non-financial companies with foreign equity holding. We begin with the purpose sampling to sorting our population. This research seeks to know cause of financial performance from ownership structure, so we take equal size of totally domestic companies by following random sampling.

3.2 Data Description and Analysis

The data contain 192 firms with the time period from 2006 to 2016, but all firms don’t have measurements in all time periods. Therefore the type of data is unbalance panel data. A panel data set has more than one units, each of which has repeated estimations at various timeframes.

To analyze the data, this research applied different suitable statistical technique. The statistical techniques used in the research are correlation, multiple regression analysis with considering homogeneity of the data and panel data regression model. These statistical test have been done on Eviews.

3.3 Measurement of variables

3.3.1 Dependent variables:

Return on Assets (ROA)

ROA is an accounting performance indicator. It measure firm’s profitability with respect to total asset. ROA is considered by dividing a firm’s annual incomes by its total assets. The higher value of ROA is supposed as healthier, because the company makes more cash on less investment.

\[
\text{ROA} = \frac{\text{Net profit before taxes}}{\text{Average of (Non-Current Assets + Current Assets)}}
\]

Return on equity (ROE)

ROE is a measure of firm’s profitability. It shows the firm's productivity from every unit of shareholders' equity.

\[
\text{ROE} = \frac{\text{Net profit before taxes}}{\text{Average of Shareholder's equity}}
\]

Tobin’s Q Ratio.

Tobin’s Q ratio is one of the company performance indicator. It shows the market value of company asset in comparison of its book value.

\[
\text{Tobin Q} = \frac{(\text{Market value of equity} + \text{book value of debts})}{\text{Book value of Assets}}
\]
If the value of the tobin’s Q is less than 1, it means that the total value of the firm are less than the book value of assets. And if the value of tobin’s q is greater than 1 it shows that firm’s values are more than the book value of the assets.

3.3.2 Independent Variable

Ownership Structure

Ownership structure is measured as percentage of shares hold by foreign investor and director of the company.

Control variables

To control the size effects, the natural logarithm of total sale is incorporated as a proxy for size of firm (Kamran & Shah, 2014).

4. Empirical Analysis

4.1 Descriptive statistics

The direct analysis of large panel data is impossible. The data can be analyzed by using different techniques of descriptive statistics. The mean value of performance measure ROA in this study is 7.86 with ranging from -90 to 78 and the standard deviation is 13.7. Similarly the mean value of two other performance measures ROE and Tobin’s Q are 18.03 and 1.58 with ranging from -446.74 to 2893 and 0.25 to 167.4 respectively. The standard deviation of ROE and Tobin’s Q are 94.6 and 4.7.

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>7.85633</td>
<td>5.845</td>
<td>78</td>
<td>-90</td>
<td>13.7503</td>
<td>1376</td>
</tr>
<tr>
<td>ROE</td>
<td>18.0277</td>
<td>14.3189</td>
<td>2893.03</td>
<td>-446.736</td>
<td>94.6143</td>
<td>1376</td>
</tr>
<tr>
<td>TOBINQ</td>
<td>1.5785</td>
<td>0.9735</td>
<td>167.4025</td>
<td>0.250633</td>
<td>4.7548</td>
<td>1376</td>
</tr>
<tr>
<td>AGE</td>
<td>37.8023</td>
<td>37</td>
<td>153</td>
<td>2</td>
<td>17.0009</td>
<td>1376</td>
</tr>
<tr>
<td>LOG_SALE</td>
<td>6.63745</td>
<td>6.60506</td>
<td>9.074685</td>
<td>2.296665</td>
<td>0.73173</td>
<td>1376</td>
</tr>
<tr>
<td>DIRECTOR_OWNERSHIP</td>
<td>0.22376</td>
<td>0.11072</td>
<td>0.974792</td>
<td>0</td>
<td>0.25929</td>
<td>1376</td>
</tr>
<tr>
<td>FOREIGN_OWNERSHIP</td>
<td>0.15885</td>
<td>0</td>
<td>0.958619</td>
<td>0</td>
<td>0.26339</td>
<td>1376</td>
</tr>
</tbody>
</table>

The intention of this research is to analyze the firm’s performance with effects of its ownership structure. There are number of another variable that could affect the firm’s performance. To control the effect of other variables we use age and log of sale as control variable. The average age of firms in data of this research is 37 year with the minimum and maximum 2 to 153 year and standard deviation is 17 year. The mean value of log sale is 6.63 with ranging from 2.29 to 9.07 and standard deviation is 0.73.
Ownership structure is one of the most imperative measures of this research. This research decomposes the ownership structure into structure into two main constituents, foreign ownership and director ownership. The average percentage of foreign equity holder is 15.8% with ranging from 0 to 95.9% and standard deviation is 26.3%. Whereas mean value of director equity is 22.3% with minimum value is 0% and maximum is 97.4%, the standard deviation is 25.9%.

4.2 Correlation.

In order to examine the potential correlation table II summarize the correlation between the variables. It could be seen that there is no evidence of strong correlation between the variables. Director ownership is weak negatively correlated to return on equity, return on asset, sale, foreign ownership and Tobin’s q. There are not any evidence of a strong correlation between sales, return on equity, and return on asset, tobinq and foreign ownership. It could be observed that the correlations between independent variables are tolerable and not signifying any Co linearity.

Table 2: Correlation

<table>
<thead>
<tr>
<th>DIRECTOR OWNERSHIP</th>
<th>FOREIGN OWNERSHIP</th>
<th>ROA</th>
<th>ROE</th>
<th>SALE</th>
<th>TOBIN Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECTOR OWNER</td>
<td>1.000</td>
<td>-0.387</td>
<td>-0.199</td>
<td>-0.086</td>
<td>-0.178</td>
</tr>
<tr>
<td>FOREIGN OWNER</td>
<td>-0.387</td>
<td>1.000</td>
<td>0.245</td>
<td>0.094</td>
<td>0.117</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.199</td>
<td>0.245</td>
<td>1.000</td>
<td>0.192</td>
<td>0.088</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.086</td>
<td>0.094</td>
<td>0.192</td>
<td>1.000</td>
<td>0.041</td>
</tr>
<tr>
<td>SALE</td>
<td>-0.178</td>
<td>0.117</td>
<td>0.088</td>
<td>0.041</td>
<td>1.000</td>
</tr>
<tr>
<td>TOBINQ</td>
<td>-0.086</td>
<td>0.100</td>
<td>0.112</td>
<td>0.050</td>
<td>0.010</td>
</tr>
</tbody>
</table>

4.3 Financial performance of firms listed in Pakistan Stock Exchange (ROA, ROE, and Tobin’s Q) without time effect (considering homogeneity)

Table III discover how the change in foreign ownership and director ownership effect firm’s financial performance. Pooled OLS ignore the cross section and time series nature of the data and believes the homogeneity of all sectors. It does not treat all the periods of the data in individual way and assume all period as single section of data and assume a constant intercept and slope across the time period.

The coefficient of intercept has the value -25.888, suggesting that when firm’s equity do not hold by foreigner and director then firm’s return on asset is -25.888 percent. If the firms have no foreign owner it’s explain that total equity of firms own by domestic investor (shown in figure I).
H1: There is impact of foreign ownership on return on asset (ROA) without time effect. 

The partial slope coefficient of foreign ownership shows that when foreign equity holder increase by one percent the firm’s return on asset increase by 6.125 percent, holding director ownership as constant. The p-value of the coefficient shows that the estimate is statistically significant at conventional level and supports our hypothesis “There is impact of foreign ownership on return on asset (ROA) without time effect.”

H2: There is impact of director ownership on return on asset (ROA) without time effect. 

Partial slope coefficient of director ownership is -3.62, suggesting that if director ownership increases by one percent then return on asset decrease by 3.62 percent, considering homogeneity across the period. The p-value of the estimate is less than the conventional level. The finding of the estimate supports our hypothesis “There is impact of director ownership on return on asset (ROA) without effect specification.”

The coefficient value of log sale suggest that one percent increase in sale positively impact on return on asset and it increase by 4.725 percent. The coefficient value of age of the firm is 0.040, explained that as the firms age increase by one year return on asset also increase by 0.040 percent. In other words it can be explained that firms earn more return as they get old. P-value of log sale and age are statistically significant. The value of R-square of the model is 0.123, which implies that 12.3% variability of return on asset is being explained by the variation in explanatory variables.

F-test of the model explained that whether overall linear regression model provides a better fit to the data whereas t-value explained just one variable at a time. F-value of the model is 539.56 and its p-value is 0.00, which suggest that overall model is fit for the data at conformist level of significant. The value of variance inflation factor of the model is 1.141, which shows that there is not any evidence of multi co linearity between independent variable.
**H₃:** There is impact of foreign ownership on return on Equity (ROE) without time effect.

When we regress pooled OLS with return on equity, then the partial slope coefficient of foreign ownership is 15.736, suggesting that return on equity rises by 15.736 percent, cause by one percent increase in foreign ownership, holding director ownership as constant. The p-value of the coefficient well less from the conventional level, which support the finding of the estimate as it is statistically significant and support our hypothesis that "There is impact of foreign ownership on return on equity (ROE) without time effect."

**H₄:** There is impact of director ownership on return on Equity (ROE) without effect specification.

Partial slope coefficient of director ownership suggest that firm’s return on equity decrease by 22.135 percent reason by director hold one percent more shares, holding the foreign ownership constant. The p-value of the estimate shows that estimate is statically significance. The finding of the estimate supports our hypothesis "There is impact of director ownership on return on equity (ROE) without time effect."

The coefficient value of log sale suggest that one percent increase in sale positively impact on return on equity and it increase by 2.975 percent. The coefficient value of age of the firm is -0.201, explained that as the firms age increase by one year return on asset equity decrease by 0.201 percent. The associated P-value of log sale and age suggest that estimates are statistically significant. The value of R-square in the model is 0.01 which implies that just 1% variability of return on equity is being explained by the variation in independent variables.

F-value of the model is 19.17 and its p-value suggest that overall model is fit for the data at predictable level of significant. The value of variance inflation factor of the model is 1.01, which shows that there is not any evidence of multi collinearity between independent variable.
There is impact of foreign ownership on Tobin’s Q without time effect.

The beta coefficient of foreign ownership is 1.395. This value explained that the value of the ratio Tobin’s q increase by 1.395, cause by one percent increase in foreign ownership, holding director ownership as constant. The p-value of the coefficient is well less and support the finding of the estimate as it is statistically significant and confirmed our hypothesis that “There is impact of foreign ownership on Tobin’s Q without time effect.”

There is impact of director ownership on Tobin’s Q without time effect.

Partial slope coefficient of director ownership is -0.7564, suggesting that firm’s tobin’s q ratio decrease by 0.7564 percent, reason by director hold one percent more shares, holding the foreign ownership constant. The p-value of the estimate is statically significance. The finding of the estimate carries the hypothesis “There is impact of director ownership on return on Tobin’s Q without effect specification.”

The coefficient value of log sale suggest that one percent increase in sale positively impact on tobin’sq ratio and it increase by 0.204. The coefficient value of age of the firm is 0.0045, explained that as the firms age increase by one year tobin’s q ratio increase by 0.0045 per year. The related P-value of log sale is well less from predictable level and suggest that log of sale is statistically significant but age is not.

The R-square illustrate variability of dependent variable explicated by predictor variable. The value of R-square in the model is 0.0154 which implies that just 1.5% variability of tobin’s q ratio is being explained by the variation in independent variables. F-value of the model is 29.35 and its p-value suggest that overall model is fit for the data at 1% level of significant. The value of variance inflation factor of the model is 1.015, which shows that there is not any confirmation of multi collinearity between independent variable.

4.4 Financial performance of firms listed in Pakistan Stock Exchange (ROA, ROE, and Tobin's Q) with effect specification of panels.

Panel data comprises variable that vary across the time and cross section. The technique use to analyze this model is pooled regression, fixed effect or random effect. Pooled OLS estimator ignores the panel structure and does not distinguish between industries and do not take into account the cross section and time series character of the data. The fixed effect model tolerate for heterogeneity or uniqueness between different cross-sections, this individuality does not differ across the time and correlated with the explanatory variable. Random effect model also permits for heterogeneity and is also time invariant but the individual specific effect is uncorrelated with the explanatory variables.
Table 3: Impact of ownership on financial performance without effect (considering homogeneity) specification (ROA, ROE, and Tobin’s Q)

<table>
<thead>
<tr>
<th></th>
<th>Constant</th>
<th>Foreign ownership</th>
<th>Director ownership</th>
<th>Log (sale )</th>
<th>Age</th>
<th>R²</th>
<th>F stat</th>
<th>Prob</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROA</strong></td>
<td>-25.89</td>
<td>-25.13</td>
<td>0.00</td>
<td>6.152</td>
<td>14.24</td>
<td>6.152</td>
<td>14.24</td>
<td>0.00</td>
<td>6.152</td>
</tr>
<tr>
<td><strong>ROE</strong></td>
<td>-17.44</td>
<td>1.357</td>
<td>0.00</td>
<td>6.3965</td>
<td>2.916</td>
<td>6.3965</td>
<td>2.916</td>
<td>0.00</td>
<td>6.3965</td>
</tr>
<tr>
<td><strong>Tobin’s Q</strong></td>
<td>0.0233</td>
<td>0.96</td>
<td>0.175</td>
<td>15.736</td>
<td>2.98</td>
<td>15.736</td>
<td>2.98</td>
<td>0.00</td>
<td>15.736</td>
</tr>
</tbody>
</table>

4.4.1 Random effect model for return on asset

Model specification tests propose that the random effect model is appropriate method when we regressed the explanatory variables with return on asset.

The intercept term, shown in table IV explained that when foreign investor and director do not hold firm’s equity, then return on equity is -24.82. If foreign investor does not hold firm’s equity then total equity owned by local investor, so we can explain that totally locally owned firm’s return on asset is -24.82. The associated p-value of t-test is 0.00, which is significant at conventional level.

H₇: There is impact of foreign ownership on return on asset (ROA) with time effect.

The slope coefficient of foreign ownership in table IV is 6.632 demonstrate that increase in percentage of equity of foreign investor result in increase in firm’s return on asset. The p-value of associated t-test is 0.00, which is less than the predictable level of significant. So, the regression finding support the hypothesis that “There is impact of foreign ownership on return on asset (ROA) across the time”.
Table 4: Dependent Variable: ROA
Method: Panel (Period random effects)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-24.82177</td>
<td>3.219988</td>
<td>-7.708653</td>
<td>0.0000</td>
</tr>
<tr>
<td>FOREIGN_OWNERSHIP</td>
<td>6.632446</td>
<td>1.333134</td>
<td>4.975077</td>
<td>0.0000</td>
</tr>
<tr>
<td>DIRECTOR_OWNERSHIP</td>
<td>-2.854874</td>
<td>1.394256</td>
<td>-2.047597</td>
<td>0.0408</td>
</tr>
<tr>
<td>LOG_SALE</td>
<td>4.790665</td>
<td>0.467875</td>
<td>10.23919</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

H₈: There is impact of director ownership on return on asset (ROA) with time effect.

The coefficient value of director ownership in table IV is -2.85 explain that when firm’s director own more equity the firm return on asset decrease by 2.85, across the time. The associated significant value is 0.0408, support the hypothesis that “There is impact of director ownership on return on asset (ROA) across the time”. It can be further explain that over the time as the firm’s director own more stock, its impact significant negative on firm return on asset.

The slope coefficient of log sale is 4.79 and its associated p-value 0.00 in table IV explain that as the firm’s sale increase firms return on asset also significantly increases. The value of R-square in the model is 0.122 which implies that 12.2 % variability of return on asset is being explained by the variation in explanatory variables. The p-value of f-test is 0.00 shows that the overall model is significant at 5%.

H₉: There is impact of foreign ownership on return on equity (ROE) with time effect.
H₁₀: There is impact of director ownership on return on equity (ROE) with time effect.

Model specification test significantly support the pool OLS method with return on equity as dependent variable. We can conclude that there is no evidence of heterogeneity across the time. It make clear that impact of foreign ownership and director ownership on return on equity are not specific across the time. Moreover we can say that the effect of foreign ownership and director ownership on return on equity across the time and without effect of time is not significantly different.

4.5 Random effect model with Tobin’s Q

Model specification tests propose that the random effect model is appropriate method when we regress the explanatory variables with tobin’s Q.

The finding of random effect model shown in table V The intercept term shows that when foreign investor and director do not hold firm’s equity then the Tobin’s q ratio is 0.22. it can be explain that when firms totally owned by domestic investor then Tobin’s q ratio is 0.22. The p-value of estimate is higher, which do not support the finding.
Table 5: Dependent Variable: TOBINQ
Period Random Effects

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.224646</td>
<td>1.151561</td>
<td>0.195080</td>
<td>0.8454</td>
</tr>
<tr>
<td>FOREIGN_OWNERSHIP</td>
<td>1.449974</td>
<td>0.479618</td>
<td>3.023185</td>
<td>0.0025</td>
</tr>
<tr>
<td>DIRECTOR_OWNERSHIP</td>
<td>-0.756365</td>
<td>0.505330</td>
<td>-1.496773</td>
<td>0.1347</td>
</tr>
<tr>
<td>LOG_SALE</td>
<td>0.191585</td>
<td>0.168481</td>
<td>1.137134</td>
<td>0.2557</td>
</tr>
</tbody>
</table>

**H₁₁:** There is impact of foreign ownership on tobin’s q ratio with time effect.

The beta coefficient of foreign ownership is 1.44, shows that when foreign ownership increase by one percent. Then tobin’s q ratio is also increase by 1.44. The p-value of associated t-test is less than the conformist level, which support the hypothesis that “There is impact of foreign ownership on Tobin’s q ratio with time effect of firms listed in Pakistan Stock Exchange.”

**H₁₂:** There is impact of director ownership on tobin’s q ratio with time effect.

The beta coefficient of director ownership -0.76, makes clear that if director owned one percent more shares than tobin’s q ratio is decrease by 0.76. The relative p-value of t-test is not less than traditional level. So, the finding do not support the hypothesis that “There is impact of foreign ownership on tobin’s q ratio with time effect of firms listed in Pakistan Stock Exchange.”

The beta coefficient of log sale is 0.191, but the p-value of log sale if not significant. The value of R-square is 0.015, explain that just 1.5 of tobin’s q is being explained by the variation in independent variables. The p-value of f-test is less than the traditional significant level, shows that over all model is significant at 5%.

5. Discussion
5.1 Foreign Ownership on firm’s financial performance.

Most of the Pakistan’s firms previously owned by government, and they depended on state for financial resources. As the time passes a number of firms were privatized with diverse ownership structures. This research mainly focuses on foreign equity holder in diverse ownership structure. Foreign ownership slowly turns out to be an important part of ownership structure, it supposes as one of the key foundation of sustainable economic growth in emerging economies. The finding of this research suggests that foreign equity holding have significant positive impact on return on asset, return on equity and Tobin’s q ratio, when homogeneity assumed across the period and cross section.

The heterogeneity found across the period with intercept is not correlated regressor, when return on asset and Tobin’s Q are used as dependent variables, but it is not found any evidence of heterogeneity
when we regress with return on equity. However the result is similar, in case of heterogeneity and homogeneity across the time. It can be suggest that foreign ownership in Pakistan stock exchange listed firms offers the benefit in financial performance, although the foreign ownership may not have the largest proportion of ownership structure in Pakistan. The ownership of majority of the firms is considered by the concentration of different groups including family members, associated firms, institutional investors and local investor.

The finding is persistent with recent result of Ahmed (2018); Yasser and Al Mamun (2016), found positively association bet foreign owners and firm’s accounting performance of Pakistan stock listed companies. Hunjra, Naeem, Noor and Saleem (2016); Khan and Nouman (2017), didn’t find significant association between foreign ownership with return on asset and with return on equity in Pakistan. If we look up the role of foreign ownership in international perspective Mishra (2014); Pung and Mishra (2016); Bhat (2017); Beatson and Chen (2018) found positive relationship between foreign equity and financial performance. In contrast Ananchotikul (2008) explain that small number of shares hold by foreign, then they don’t have significantly impact on performance. Tsegba and Ezi-Herbert (2011); Azzam, Fouad and Ghosh (2013) didn’t find significantly positive impact of foreign equity holder on performance.

The variation in performance advantage could be because of different institutional system, market size and specific location (Carney, Estrin, Liang, & Shapiro, 2018). Finally, our result pursues the importance of foreign equity and its performance base explanation in Pakistan.

5.2 Director Ownership on firm’s financial performance.

In Pakistan controlling shareholder exists in form of director ownership. The corporate decisions are affected by director and they have different decision making styles. In this research we also consider the role of director ownership in corporate governance. Most of the recent empirical studies suggest that controlling shareholder have significant control over the firm and they involved in governance system. Carney, Estrin, Liang, and Shapiro, (2018) consider the important determent of performance is director ownership, because of possible separation of ownership and control. The general perception is if director hold the reasonable fraction of firm’s equity, it supports to line up the corporate governance mechanism and increase the value of the firm. However empirical studies reflect the ambiguous results.

The finding of this research suggests that if director hold more equity of the firm then firm’s financial performance significant decreases. When, the homogeneity assumed across the period and cross section.

The heterogeneity found across the period with intercept is not correlated regressor, when return on asset and Tobin’s Q are used as dependent variables, but it is not found any evidence of heterogeneity when we regress with return on equity. It is found the significant negative effect of director ownership on
return on asset and return on equity, the effect of director ownership on Tobin’s q is negative but not significant in case of heterogeneity across the time. In contrast to the findings of Jensen and Meckling (1976), this result shows negative impact of director ownership on firm’s performance in both cases.

The result is consist with Butt and Hasan (2009); Shah and Hussain (2012); Ahmed, Wang, and Khan (2013); Abdullah, Shah, and Khan (2012) in context of Pakistan stock market listed firms. As the result shows significantly negative effect so, the study does not supportive enough to agency theory, in case of Pakistan. Whereas Arshad and Javid (2014) explain if director hold more than 25 percent companies equity, its impact negatively on firm’s performance. In conclusion it can be explain that agency problems arise due to increase in director Shareholdings in Pakistani context, which eventually impacts the performance of the firm.

The international empirical literature reveal mix finding. Din and Javid (2011) supported the agency theory, if firm’s management own more shares, it resolve the conflict and significantly improve its accounting performance. Kunst and Beugelsdijk (2018) explain that the positive and negative impact could vary because of cultural boundaries.

The age and sale of the firms could strongly influence research results, they are not held constant during the analysis in order to test the relative relationship of the ownership and performance variables. The research result suggest that log of sale significantly positive associated with all measures of performance. It’s shows that as the firm’s sale increases its financial performances raises. This finding indicates that large size firms enjoy the benefits of scale economies and impact positively on firm’s performance. These result are consist with Ahmed Sheikh, Wang and Khan (2013); Abor (2007) and Gleason et al. (2000).

It is observed that as the time passes firm’s return on equity significantly increases whereas return on equity decreases. It is not found any significant association between age and Tobin’s q ratio. Firm age (AGE) effects on firm performance are ambiguous.

6. Conclusion

As per the detailed statistical analysis of firm’s financial statement and study variables, this study concludes that foreign ownership has positive impact on accounting performance of the firm whereas director equity has negative impact. This study identified three commonly used measures of financial performance of firm, namely, return on equity, return on asset, and Tobin’s Q ratio. The results showed that there is positive impact of ownership on financial performance and more specifically foreign ownership has significant improvement in terms of return on asset, return on equity and tobin’s Q ratio. On the contrary, in case of the director ownership this study concludes a negative relationship with firm’s profitability and
performance (measured through return on asset and return on equity). However, the negative relationship of director equity on Tobin’s Q was not statistically significant.

References


