The Role of Corporate Governance in Firm’s Stock Performance

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ABSTRACT

The increasing trend of globalization and stock volatility attracts academic researchers to investigate the causes. As economic globalization has radically increased, there is a need to know more about corporate governance. The shareholder’s pattern of firms gives an understanding of corporate control and good governance. These aspects provide the researcher with an explanation of how shareholder behaviour may influence market volatility and valuation. To analyze the impact of the firm’s ownership structure on the market performance of a firm, the ownership structure is decomposed by the percentage of equity. Whereas market to book ratio and stock volatility for market performance. We use the sample of 192 companies, from the period of 2006 to 2018. The study used different suitable statistical techniques such as “correlation, and multiple regression analysis”. The statistical analysis indicates that foreign ownership significantly reduces stock volatility and enhances the firm’s stock valuation compared to its book value. Director ownership is a cause of rising stock volatility and it could not play a significant role in enhancing a firm’s stock valuation. This research will also provide critical recommendations for academics and economic growth.

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1. Introduction
1.1. Corporate Governance in Pakistani Listed Companies

After the independence of Pakistan, in 1949, Pakistan adopted “The Indian Companies Act, 1913”. After the broad discussion in 1984, it was revised in specific regards and the Companies Ordinance was stated. In 1997 the Securities and Exchange Commission of Pakistan (SECP) was formed, initially, it had the concern of regulating the corporate sector and capital market. In 1999, its responsibility was extended to the Corporate Law Authority. In March 2002, SECP issued the “Code of Corporate Governance” to strengthen the governing tool and its implementation.
Due to the growth of economic globalization, the role of foreign investors attracted substantial academic research (Rajan, 2003). As economic globalization has radically increased, there is a need to know more about corporate governance (Heubischl, 2006). Economic development in Pakistan has been unpredictable, without consistent development and adding to the financial weakness. The government is trying to improve Pakistan’s economic climate by attracting higher investment inflows.

Pakistan is the sixth most populated nation in the world. The economic performance of Pakistan is volatile, and the government’s effort to improve the economic environment to attract investment inflow. The Investment Policy of Pakistan 2013 offers foreign investors direct investment in each sector and even there does not impede getting or taking out capital. The government of Pakistan is encouraging the facilities to increase foreign investment.

The equity market, where locally incorporated companies are trading is the best mode of investment. Pakistan’s equity markets are less developed, Security Exchange Commission of Pakistan regulates the equity of the listed corporation. Family-run corporations play a substantial part in Pakistan. In comparison to other emerging economies, the shareholders in Pakistan may have different incentives.

It is generally confirmed the benefit of foreign investors in the host country by most of the previous research. Foreign investments are the major source of financing for the emerging economy. Foreign owned firms compared to local ones are better in terms of technology and capital due to their better productivity and enhanced performance (Goethals & Ooghe, 1997). According to Lean (2008), foreign direct investment is beneficial for host countries when there is enough skilled labour force. Internal competence which influences the viability of learning and information transfer, is one of the main causes for getting the benefit from foreign investment (Cui & O’Connor, 2012; Mukherjee, Tsai, & Wang, 2011).

Vo (2017) revealed that the strong influence of foreign investment on host firms is linked with several explanations. If the foreign investor trades in large volume, if they are from developed economies and have strong experience in financial markets. They further clarified that foreign investors usually follow each other to sell or purchase a stock and this may strongly affect stock volatility. Kang, Kwon, and Park (2016) explained the additional advantage of foreign investment. They assert that foreign traders have more information about the global market and trading activities as compared to local traders.

1.2. Problem Statement

Worldwide stock market volatility is one of the most essential problems. Most of the world economic crises are a reason for high stock market volatility, a recent example of the world financial crisis in 2008 persuaded the researcher toward the topic. This market volatility issue also exists in the Pakistan stock market. So, this research will investigate the causes of the firm level “stock return volatility” in Pakistan.

The globalization of the stock markets is a particularly important decision in economic development. As economic globalization has radically increased, there is a need to know more about corporate governance (Heubischl, 2006). The shareholder's pattern of firms gives an understanding of corporate control and good governance (Fernando, 2009). These aspects provide the researcher with an explanation of how shareholder behaviour may influence market volatility and valuation.

Corporate governance is a predominant target of this study because it has strong results for the firm. It includes shareholders, the board of directors, management compensation, corporate governance policies, ownership classification etc. Both Desender
and Shleifer and Vishny (1986) assert that the structure of ownership is an essential component of effective corporate governance procedures. Many different academics came up with different classifications for the ownership structure. According to the findings of this research, the ownership structure is comprised of shares that are owned by directors and by foreign investors.

The expanding liberalization of several stock markets in the past couple of years has facilitated the stream of worldwide capital to participate domestic market. It is assumed that foreign capital is the cause of volatility in domestic markets (Grabel, 1995).

2. Literature Review

Wang (2007) studied the Indonesia and Thailand stock market and explained that after liberalization cross border trading in the local stock market, especially stock selling has a prevailing effect on domestic financial market volatility, local investors as whole price followers, not the price setter, for making it clearer and robust; he uses different measures of volatility in different sub-periods and finds similar results.

Huang and Shiu (2009) analyzed foreign equity holders’ effect on Taiwan’s stock market. They revealed that firms with high overseas ownership have a prominent effect on the stock market as compared to low overseas ownership. They concluded that stock valuation is strongly associated with performance, which is profound by foreign ownership. Bley and Saad (2011) explained that foreign sharing directly in the domestic stock market has no positive or negative impact on volatility, but through investment account, it has significantly reduced overall volatility, especially for stocks with weak external ownership limits.

Li, Nguyen, Pham, and Wei (2011) considered foreign share ownership at the firm level in 31 developing stock markets and investigated the impact on stock volatility. They found that the stock return volatility is negatively caused by foreign ownership. Romalis (2011) used the firm’s data on share prices and foreign investment by taking a sample of 20 emerging markets. He explained that stock price is looking for whether the foreign ownership positively changes the firm’s valuation. He did not find any strong evidence that the firm’s value was positively caused by foreign equity holders. Further, he explained that if the host country is in crisis, then foreign ownership positively impacts on firm’s value.

In Vietnam, Vo (2015) demonstrates that firm stock volatility is negatively caused by foreign investors. They further suggested that stabilizing the role of foreign investors could be the potential advantage of expanding foreign investment in emerging stock markets. Huyghebaert and Wang (2019) reveal that firm’s value creation is caused by manager ownership and leading shareholder controls of firms listed in China. Companies with higher valuations, trade at a higher market-to-book ratio.

Makhija and Spiro (2000) analyze the sample of Czech firms and suggest that the firm’s equity market values are positively associated with the foreign and firm’s insider ownership. They credited the equity market values to the superior ability of owners. Adams, Hardwick, and Zou (2008) measured the risk as the volatility of a firm’s stock returns and found that the different types of firms’ structures of ownership seem to have significant but different impacts on stock risk and returns in the Republic of China. According to their findings, the ownership of the firm's equity by foreign entities and directors has minimal impact on the stock risk and returns of the firm. Isshaq, Bokpin, and Mensah Onumah (2009) didn’t find a significant relationship between a firm’s inside shareholders and stock value on the Ghana Stock Exchange.

The participation of the directors in the ownership of the company appears as one of the mechanisms that allow diminishing the opportunistic behaviours of each of these groups. In
this sense, it is thought that if they have a direct participation in the company, when making decisions their wealth will be compromised which further accelerates its value (Ducassy & Guyot, 2017). Nevertheless, behavioural risks exist. In the case of risk aversion with managers or directors, there is a possibility that they may prefer policies instead of firms’ maximization value. Thus, limits the risk which results in negative consequences (Darko, Aribi, & Uzonwanne, 2016). The scenario also exists where managers stick to their position and shareholders do not have the power to dismiss due to the majority ownership which supports the manager (Ducassy & Guyot, 2017).

To conclude, it can be said that the ownership structure’s effect on a firm’s value relies on the balance which happens to be fitted between the entrenchment effect and shareholders’ interest. Thus, there is a possibility that a limited % of participants can be of concern in the capital of director and executive. This indicates that a significant proportion of participants are unwilling to make concessions while making judgments (Ducassy & Montandrau, 2015). One approach is to use relatively low percentages, so that when it is time to make decisions or develop strategies, a significant portion of their wealth is not at stake. If the management is risk-averse, there is a tendency to prioritize minimizing the risk to the company rather than maximizing its value (Huang & Zhu, 2015).

2.1. Conceptual Frame Work

![Conceptual Frame Work Diagram]

Figure 1: Conceptual Frame Work

Hypothesis

H₁: Foreign ownership effects Market Volatility without time effect.
H₂: Director Ownership effects Market Volatility without time effect.
H₃: Foreign Ownership effects Market to book ratio without time effect.
H₄: Director Ownership effects Market to book ratio without time effect.
H₅: Foreign ownership effects Market Volatility with time effect.
H₆: Director Ownership effects Market Volatility with time effect.
H₇: Foreign Ownership effects Market to book ratio with time effect.
H₈: Director Ownership effects Market to book ratio with time effect.

3. Data and Methodology

3.1. Population and Sampling

The study's population consists of enterprises that are listed on the Pakistan Stock Exchange. The sample comprises 192 enterprises, of which 96 possess foreign ownership. The study utilizes data spanning from 2006 to 2018. Initially, the study sample included non-financial firms which have foreign equity holdings. The study population is then sorted out through a random sampling technique. Since the study attempts to know how well financial
performance can be achieved from ownership structure, thus, equal size of local firms is being considered.

3.2. Data Analysis

3.2.1. Multiple Linear Regressions (OLS)

The study employed multiple linear regression analysis and assumed homogeneity across the time period. The dependent variable in this study is represented by volatility and market to book ratio, whereas the independent variables are foreign ownership and director ownership. The regression model employed for Ordinary Least Squares (OLS) analysis has been shown below:

i) \( \text{Market volatility} = \alpha_0 + \alpha_1 \text{FOR}_i + \alpha_2 \text{DIR}_i + \alpha_3 \text{LOG}(\text{sales})_i + \alpha_4 (\text{age})_i + \mu \)

ii) \( \text{Market to book ratio} = \alpha_0 + \alpha_1 \text{FOR}_i + \alpha_2 \text{DIR}_i + \alpha_3 \text{LOG}(\text{sales})_i + \alpha_4 (\text{age})_i + \mu \)

3.2.2. Panel Regression Model

Panel data indicates the data that covers time and cross-section both data types. Thus, such type of data either has the cross-sectional or period effect or both. Moreover, panel data might assume homogeneity and, thus, don't have both effects. In this situation, OLS pool regression is an appropriate choice (Park, 2011). In the study, the effect of owners on stock evaluation is evaluated with time effect and the cross-sectional effect is ignored. This is because the sample consisted of an equal number of firms.

4. Empirical Analysis

4.1. Descriptive Statistics

This study employs the market to book ratio and volatility as indicators of a firm's stock performance. The mean stock volatility is 0.62, ranging from 0 to 2.24, with a standard deviation of 0.36. The market to book ratio has a mean value of 1.94, ranging from -155.6 to 221.7. The standard deviation is 9.07. Other elements may also impact the performance of a corporation. Thus, to manage the impact of these variables, the study incorporates age and the logarithm of sales as control variables, with an average value of 6.63 and a standard deviation of 0.73.

**Table 1**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Max</th>
<th>Min</th>
<th>STDEV</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLATILITY</td>
<td>0.624252</td>
<td>0.506193</td>
<td>2.246439</td>
<td>0</td>
<td>0.362968</td>
<td>1376</td>
</tr>
<tr>
<td>M/B</td>
<td>1.947683</td>
<td>0.778143</td>
<td>221.7308</td>
<td>-155.556</td>
<td>9.017391</td>
<td>1376</td>
</tr>
<tr>
<td>AGE</td>
<td>37.80233</td>
<td>37</td>
<td>153</td>
<td>2</td>
<td>17.00088</td>
<td>1376</td>
</tr>
<tr>
<td>LOG_SALE</td>
<td>6.637451</td>
<td>6.60506</td>
<td>9.074685</td>
<td>2.296665</td>
<td>0.731729</td>
<td>1376</td>
</tr>
<tr>
<td>DIRECTOR_OWNERSHIP</td>
<td>0.223761</td>
<td>0.11072</td>
<td>0.974792</td>
<td>0</td>
<td>0.259293</td>
<td>1376</td>
</tr>
<tr>
<td>FOREIGN_OWNERSHIP</td>
<td>0.158851</td>
<td>0</td>
<td>0.958619</td>
<td>0</td>
<td>0.263393</td>
<td>1376</td>
</tr>
</tbody>
</table>

4.2. Pakistan Stock Exchange Enterprises' Market performance (time-independent)

Table 2 explains the change in the firm’s market performance caused by the percentage change in equity hold by foreign investors and directors. Pooled ordinary least square regression is applied with neglecting.
4.2.1. Market Volatility

The first row of Table 2 contains the regression findings that show how the ownership structure of a company affects the market volatility of the company. When the equity of a company is controlled by local investors and when foreign investors do not possess firm equity, the differential in stock price is 1.865. This can be explained by the fact that that is the case. This indicates that the intercept term is statistically significant, as indicated by the p-value.

**H$_1$: Foreign ownership affects market volatility regardless of time.**

The coefficient for the slope of foreign ownership is -0.043. This indicates that for every one percent rise in foreign ownership of a company's equity, there is a corresponding decrease of 0.043 percent in the volatility of its stock price, assuming all other variables remain equal. The decrease in domestic investor ownership of stocks might be a contributing factor to the rise in foreign ownership of stocks. There is a notable disparity between the standard level and the p-value of 0.005 for the slope coefficient. The presence of foreign ownership has a considerable impact on market volatility, regardless of the time factor. Therefore, it can be argued that this relationship is statistically significant.

**H$_2$: Director ownership does affect market volatility**

The slope coefficient of a director's ownership is 0.21. Under the condition that all other factors remain unchanged, it may be inferred that if a director's ownership of the company's equity increases by 1%, there would be a corresponding 0.21% rise in the volatility of the business's stock value. The estimate is deemed statistically significant due to its p-value of 0.00. Hence, the presence of Director Ownership influences Market Volatility in the firms listed on the Pakistan Stock Exchange, without specifying the nature of this effect.

Considering that the value of the log sale coefficient is -0.18, it can be said that as the company's sales increase, the stock value of the company becomes more stable. Because the coefficient value of the firm's age is 0.00, it can be deduced that the age of the firm does not have any impact on the variance of the firm's stock price. It can be inferred from the fact that the p-value for log sale and age is 0.00 that the two variables are statistically significant.

4.2.2. Market to Book Ratio

The second row of Table II presents a detailed analysis of the regression results on the influence of ownership structure on the market-to-book ratio of the company. The market-to-book ratio is calculated by dividing the market value of a company's stock by its book value. The beta coefficient of the constant term, which is -3.54, suggests that in the absence of both foreign owned and director held stock, the firm's market to book ratio would be -3.54. This value does not have a sufficient economic explanation.

**H$_3$: Foreign ownership affects market-to-book ratio, eliminating time-related effects.**

The slope coefficient of foreign ownership is 5.686, which suggests that an increase in the amount of foreign investment in a company's shares has a positive impact on the market value of the company's equity. As a result of the estimate, the p-value is 0.00, which is significantly lower than the typical level. This demonstrates that the estimate is statistically significant and lends support to the premise that there is an influence of foreign ownership on the market to book ratio, even when the temporal effect is not taken into consideration.

**H$_4$: The presence of Director Ownership has an influence on the Market to book ratio, excluding any time-related factors.**
Directors' control of more shares than what the market recognizes will lead to a decline in share value since the slope coefficient of director ownership is -0.90. This is a crucial point to clarify. A p-value that is lower than the customary level is not present in the estimate. Since the estimate is not statistically significant, we can conclude that foreign ownership does not affect the market-to-book ratio of firms listed on the Pakistan Stock Exchange, even when controlling for time effects.

The beta coefficient of the log of sales, which is 0.78, indicates that when the firm's sales increase, the firm's market-to-book ratio similarly increases by 0.78. The p-value of the logarithm of sales indicates the statistical significance of this estimate. The coefficient for age is -0.01, indicating that as the firms' age increases, the market to book ratio lowers by 0.01. However, the p-value of 0.81 suggests that this relationship is not statistically significant.

### Table 2

**Impact of Ownership Structure on Market Performance**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Constant</th>
<th>Foreign ownership</th>
<th>Director ownership</th>
<th>Log (sale)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>t-value prob</td>
<td>B</td>
<td>t-value</td>
<td>prob</td>
</tr>
<tr>
<td>volatility</td>
<td>1.865</td>
<td>51.3680.000-0.043</td>
<td>-2.799</td>
<td>0.005</td>
<td>0.21</td>
</tr>
<tr>
<td>MB</td>
<td>-3.54</td>
<td>-3.1690.0025.686</td>
<td>12.18</td>
<td>0.000</td>
<td>-0.90</td>
</tr>
<tr>
<td>R2</td>
<td>F stat</td>
<td>536.02</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.221</td>
<td>0.036</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.3. Analysis of the Stock Market Performance of Companies Listed on the Pakistan Stock Exchange, Taking into Account the Impact of Time

If the data is cross-sectional or time-series, the Pooled Ordinary Least Squares estimator will use it without considering the panel structure or any industry differentiation. Panel data is composed of variables that vary both throughout time and across the cross-section. An analysis method such as pooled regression, fixed effect, or random effect is employed to examine this model.

### 4.4. Market to Book Ratio

When calculating the market to book ratio, the market stock value of a company is divided by the book value of the investment. This calculation yields the market to book ratio. Before analyzing the impact of ownership structure on market to book ratio, it is essential to have a proper grasp of the model that is suited for the data, with the market to book ratio serving as the dependent variable. This is because the market to book ratio is going to be the dependent variable.

### 4.4.1. Model Specification Test

The following test demonstrates the importance of fixed effects, random effects, and the pooling nature of the data when regressing the same explanatory variable against the return market to book ratio, taking into account its panel structure.

### 4.4.2. Wald test

The p-value of f-stat and chi-square are not less than the conventional level of significance. The results show that there is no evidence of heterogeneity and pool OLS is an appropriate model against the fix effect model.
4.4.3. Lagrange Multiplier (LM) Test

An explanation of the importance of the random effect against pool OLS is provided by the Lagrange multiplier test. In Table 4, the results of the tests indicate that the period effect does not have a substantial impact. From this, it is evident that the pool OLS approach is the most suitable one for the data. The findings of the Wald test are supported by the results.

Table IV
Lagrange multiplier (LM) test (Market to Book Ratio)

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Cross-section</th>
<th>Period</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>136.3410</td>
<td>0.010362</td>
<td>136.3514</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.9189)</td>
<td>(0.0000)</td>
</tr>
<tr>
<td>Honda</td>
<td>11.67652</td>
<td>-0.101796</td>
<td>8.184564</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.5405)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

H₅: Foreign ownership affects market-to-book ratio over time.
H₀: Director ownership affects the market-to-book ratio over time.

The model specification test strongly supports the pool OLS method, which centres the analysis on the dependent variable and employs the market to book ratio to quantify market performance. All things considered; it is possible to conclude that neither the duration nor the direction of the data show any signs of heterogeneity. The effect of director and foreign ownership on the market to book ratio is not time-specific, as this becomes quite clear. We may also state that, both with and without time's effect, the effect of foreign and director ownership on the market-to-book ratio is statistically insignificant.

4.5. Market volatility

To analyze the impact of ownership structure on market volatility, it is necessary to know about a suitable model. The following test will examine the right model for the data with volatility as a dependent variable.

4.5.1. Model Specification Test

To determine whether or not there are fixed and/or random effects in the panel data that is currently being examined, the Wald test is used to examine the fixed effect, while the Lagrange multiplier (LM) test developed by Breusch and Pagan (1980) is utilized to examine the random effect. A Hausman test is used to evaluate the extent to which random and fixed effect estimators are comparable to one another.

4.5.2. Wald Test

Table 5 shows that the f-statistics p-value is much smaller than the conventional criterion for significance. It is clear from these results that there is strong evidence of period-to-period heterogeneity and that the fix effect model is superior to the pool OLS.

Table 5
Wald Test (Market Volatility)

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Value</th>
<th>df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>44.22105</td>
<td>(10, 1500)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Chi-square</td>
<td>442.2105</td>
<td>10</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
4.5.3. Lagrange Multiplier (LM) Test

Breusch and Pagan (1980) Lagrange multiplier (LM) test considers whether the random effect model or the pooled ordinary least squares model is better at handling heterogeneity. Both the period effect and the overall test results are below the significance level of 0.05, as shown in Table 6. Our conclusion is that, compared to the pool OLS model, the random effect model performs better when dealing with panel data.

Table 6
Lagrange multiplier (LM) test (Market volatility)

<table>
<thead>
<tr>
<th>Null (no rand. effect)</th>
<th>Cross-section</th>
<th>Period</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>One-sided</td>
<td>One-sided</td>
<td></td>
</tr>
<tr>
<td>Breusch-Pagan</td>
<td>740.5282</td>
<td>5557.437</td>
<td>6297.965</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td></td>
</tr>
<tr>
<td>Honda</td>
<td>27.21265</td>
<td>74.54822</td>
<td>71.95580</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td></td>
</tr>
</tbody>
</table>

4.5.4. Random Effects - Hausman Test

The Hausman test is employed to ascertain the relative significance and applicability of either a fixed effect or a random effect in panel data, with market volatility as the dependent variable. The test findings indicate that the p-value is not significant at a 5% level. This suggests that the random effect model is the most suitable choice for analyzing the impact of ownership structure on market volatility.

Table 7
Random Effects - Hausman Test (Market volatility)

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period random</td>
<td>7.716167</td>
<td>3</td>
<td>0.0523</td>
</tr>
</tbody>
</table>

4.5.5. Random effect model.

Table 7 indicates that 1.78 is the intercept term. This suggests that the market volatility is 1.78 when foreign investors and directors do not own shares in the company. Moreover, it can be explained that the degree of volatility in the equity trading price is 1.78 percent when local investors hold all of the company's shares. Given that the estimate's p-value is less than the 0.05 cutoff, it can be considered statistically significant.

H7: Foreign ownership affects market volatility over time.

Given that the slope coefficient of foreign ownership is -0.070, it can be deduced that an increase in the amount of foreign investor participation in a company's equity results in a reduction of 0.070 percent in the degree of volatility of the equity trading price. The p-value of the estimate is 0.019, which indicates that there is a statistically significant influence of foreign ownership on market volatility with time effect. This is noteworthy because the p-value is lower than the threshold of 0.05.

Table 8
Random Effect Model (Market volatility)

<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>1.777353</td>
<td>0.081421</td>
<td>21.82908</td>
<td>0.0000</td>
</tr>
<tr>
<td>FOREIGN_OWNERSHIP</td>
<td>-0.070064</td>
<td>0.029828</td>
<td>-2.348931</td>
<td>0.0190</td>
</tr>
<tr>
<td>DIRECTOR_OWNERSHIP</td>
<td>0.173749</td>
<td>0.031419</td>
<td>5.530079</td>
<td>0.0000</td>
</tr>
<tr>
<td>LOG_SALE</td>
<td>-0.178920</td>
<td>0.010492</td>
<td>-17.05258</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
**H8: Director ownership affects market volatility over time.**

Directors' ownership has a slope coefficient of 0.173, meaning that for every 1% rise in directors' equity holdings, there will be a 0.173% increase in the degree of volatility in equity stock price. Its statistical significance at the 5% level is explained by the p-value that is associated with that estimate. The influence of foreign ownership on market volatility over time is particularly highlighted.

The beta coefficient of the log of sales is -0.17, indicating that an increase in the logarithm of sales leads to a decrease in the volatility of stock prices. The p-value indicates that the estimate is statistically significant.

5. **Discussion**

5.1. **Foreign Ownership and Firm’s Market Performance**

Previous studies have shown that a firm's market performance is determined by its financial structure, dividend policy, and governance control and ownership structure.

This research focuses on the additional behaviour of foreign equity and analyzes how foreigners influence the market performance of the firms whose stocks they own. We used market to book ratios and stock market volatility as measures of market performance. Stock market volatility is an important matter in global equity markets which invites immense attention from both researchers and investors.

The findings of this research demonstrated that foreign ownership greatly reduces the volatility of the stock market once we supposed that the period and cross section were homogeneous. Similar to how foreign ownership greatly increased the company's book value, the equity market value of the company increased significantly as well. According to Khasawneh and Staytieh (2017), And Makhija and Spiro (2000) there is substantial evidence to suggest that foreign ownership is the factor responsible for increasing the value of a company. In contrast, Romalis (2011) does not imply that the presence of foreign ownership could increase the value of the company.

The heterogeneity across the period is found when volatility is used as a measure of market performance. Foreign owners significantly reduce the degree of variation of a trading price series over time, in case of heterogeneity and intercept is not correlated with regressor. The heterogeneity across the period when the market to book ratio is used as a measure of market performance. The effect of foreign ownership on stock volatility is the same when we assume homogeneity and heterogeneity across the period.

The finding of this research is consistent with Vo (2015) which suggests that firm ownership by overseas investors declines firm stock price volatility in the Vietnam stock market. Stocks with high foreign ownership outperform as compared to stocks with low foreign ownership (Huang & Shiu, 2009). However, Ahmed (2017), explained that foreign investors fail to reduce the stock volatility in the Egyptian equity market.

5.2. **Director Ownership of the Firm’s Market Performance**

The pros and cons of director ownership have motivated the researcher in recent years. The finding of this research adds to the existing result by assessing the role of director ownership in enhancing a firm’s stock valuation.

This research explained that director ownership is the cause of increased stock volatility, and it could not play a substantial role in enhancing a firm's stock valuation. This was the conclusion reached at what time we presumed that the period and cross section were
homogeneous. According to the findings of the research, which are in agreement with those of Huyghebaert and Wang (2019); Isshaq et al. (2009); Makhija and Spiro (2000), management ownership considerably improves the market to book ratio of the company.

The variation throughout the time period becomes apparent when volatility is employed as a metric for evaluating market performance. Director ownership has a substantial impact on the volatility of a trading price series over time, particularly when there is diversity and the intercept is not associated with the regressor. The evidence for variation over the period is lacking when the market to book ratio is employed as a measure of market performance. The outcome remains consistent regardless of whether we assume homogeneity or heterogeneity over the era. Adams et al. (2008) didn't find a significant relationship between managerial ownership and volatility.

6. Conclusion and Future Recommendations

This study examines the influence of ownership on corporate governance and its effect on market performance in Pakistan. This study argues that to enhance and strengthen the effectiveness of corporate governance in a business, it is crucial to attain the objectives of performance, growth, competitiveness, compliance, and long-term sustainability. Nevertheless, achieving a harmonious equilibrium between efficiency and compliance can pose a challenge for numerous firms.

The results of this study indicate that the type of ownership can be a factor that influences the outcome. The study looked at the volatility of the stock market as well as the ratio of the stock market to book value. Based on the results of these studies, it is evident that stock volatility is substantially lower in the event of foreign ownership when compared to companies that have direct equity. When it comes to the valuation of the company's stock, foreign shareholders have a significantly beneficial impact on the book value of the company in contrast to director equity companies. On the other hand, the study concludes that director ownership is a likely source of an increase in the stability of the company's stock and that it does not have a favourable impact on the valuation of the stock.

In summary, the aforementioned deductions indicate that foreign ownership has the potential to greatly enhance the stock performance of the company, whereas the shares held by the director do not have the same effect. Our analysis is only focused on the effect that the ownership structure has on market activity; however, we do acknowledge that several other macroeconomic factors also have an impact on the valuation of the firm and the volatility of its shares. As a result, we strongly recommend that any potential researcher should also investigate the macroeconomic and industrial variables in Pakistan in addition to the stock performance and ownership structure. Consequently, this will guarantee that the research is more pertinent and will produce recommendations that are of a higher quality for the Pakistani business industry.

Authors’ Contribution:
Kiran Farooq: Contributed to the development of the research idea and design.
Syed Muhammad Salman: Contributed to the development of the study's research methodology.
Nasir Ali: Focused on reviewing the existing literature related to intellectual capital disclosure.
Muhammad Hassan: Contributed to refining the research idea and scope.
Atif Aziz: Contributed to shaping the overall research concept.

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