DIRECTORS’ OBSERVABLE CHARACTERISTICS AND MARKET-LEVEL FINANCIAL PERFORMANCE: EVIDENCE FROM NIGERIA AND SOUTH AFRICA

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ABSTRACT

Purpose: The primary aim of this study was to examine the effects of directors’ observable characteristics on market-level financial performance in Nigeria and South Africa via ex-post-facto research design.

Method: Cross-sectional data of one hundred and eleven (111) and one hundred and sixty-four (164) financial and non-financial firms were sampled in Nigeria and South Africa respectively from 2012-2021. Directors’ observable characteristics used were board independence and gender diversity, and market-level performance indicators (Tobin’s Q and market-to-book-value ratios) Data were obtained from the annual reports and accounts of publicly quoted firms on Nigerian and Johannesburg Stock Exchanges. Data obtained were analyzed using descriptive, post-estimation and inferential statistical tools.

Results and Conclusion: The results of fixed and random effects regression revealed that while directors’ observable characteristics had significant effects on Tobin’s Q (Wald=39.87; Prob.=0.0000<0.05), an insignificant effects was found for market-to-book value (Wald = 6.27; Prob.=0.3933> 0.05) of firms in Nigeria and South. On the basis of the findings, it is recommended that management should engage in economic or business activities by way of investing more in capital assets or bonds to generate a high Tobin’s Q value for firms in Nigeria and South Africa.

Implication of the Research: The implication is that directors’ observable characteristics can serve as a means of enhancing Tobin’s Q except market-to-book value

Originality/Value: There is the need for future researches to validate the model employed by using the identified directors’ observable characteristics which were not used in this current study.

Keywords: Board Political Connection, Market-To-Book-Value, Board Independence.

CARACTERÍSTICAS OBSERVÁVEIS DOS ADMINISTRADORES E DESEMPENHO FINANCEIRO AO NÍVEL DO MERCADO: EVIDÊNCIAS DA NIGÉRIA E DA ÁFRICA DO SUL

RESUMO

Objective: O objectivo principal deste estudo foi examinar os efeitos das características observáveis dos administradores no desempenho financeiro ao nível do mercado na Nigéria e na África do Sul através de um desenho de investigação ex post facto.

Método: Foram amostrados dados transversais de cento e onze (111) e cento e sessenta e quatro (164) empresas financeiras e não financeiras na Nigéria e na África do Sul, respectivamente, de 2012-2021. As características observáveis dos diretores utilizadas foram independência do conselho e diversidade de género, e indicadores de desempenho em nível de mercado (Q de Tobin e índices de valor de mercado/valor contábil). Os dados foram obtidos dos relatórios anuais e contas de empresas cotadas publicamente nas Bolsas de Valores da Nigéria e de Joanesburgo. Os dados obtidos foram analisados por meio de ferramentas estatísticas descritivas, de pós-estimação e inferenciais.

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Resultados e Conclusão: Os resultados da regressão de efeitos fixos e aleatórios revelaram que, embora as características observáveis dos diretores tenham tido efeitos significativos no Q de Tobin (Wald=39,87; Prob.=0,0000<0,05), foram encontrados efeitos insignificantes para o valor market-to-book. (Wald = 6,27; Prob.=0,3933 > 0,05) de empresas na Nigéria e no Sul. Com base nas conclusões, recomenda-se que a gestão se envolva em atividades econômicas ou empresariais, investindo mais em ativos de capital ou obrigações para gerar um elevado valor Q de Tobin para empresas na Nigéria e na África do Sul.

Implicação da pesquisa: A implicação é que as características observáveis dos diretores podem servir como um meio de melhorar o Q de Tobin, exceto o valor de mercado para valor contábil

Originalidade/Valor: Há necessidade de pesquisas futuras para validar o modelo empregado utilizando características observáveis dos diretores identificados que não foram utilizadas neste estudo.

1 INTRODUCTION

Board of directors (BODs) have been criticized for an organization’s poor performance (including eventual failure) and/or decrease in shareholders’ investment values, especially when their functions are perceived to be poorly executed which in turn negatively affects firm performance. On the global scene, poor performance orchestrated by nefarious activities of directors and negligence in terms of controlling and monitoring has been linked to the collapse of high-profile firms such as Compaq (1990), Enron (2001), Lehman Brothers (2008), WorldCom (2002), Tyco (2002), Adelphia (2002), Heath International Holdings Insurance Group (2003), Board of Control for Crickets in India (2013), Parmalat (2003), Xerox (2002), among others.

In Nigeria, the collapse of firms can be observed in the cases of Oceanic Bank Nigeria Plc (2010); Intercontinental Bank Nigeria Plc. (2010); AfriBank and Bank PHB (2010); FinBank (2010); and Diamond Bank (2019) over alleged fraudulent mismanagement and poor financial performance which tremendously heightened public anxiety about the health of these banks. In South Africa, firms like Steinhoff Company (2019), South African Airways (2020), and Denel Arms Manufacturer (2020) were clear evidence of poor governance. For example, the case of Enron in 2001 where overstated profit amounted to $586 million is a true case of a firm’s failure. WorldCom in 2002 revealed that the operating expenses of $3.8 billion were capitalized resulting in overstating of profit; Tyco and Adelphia claimed to have lost $460 billion while Cadbury Nig. Plc. books were manipulated by management leading to a loss of over ₦15 billion.

Due to the innumerable BoDs instituted by firms, it is logical to inquire why loads of BoDs, why their existence and more notably, how can BoDs improve the performance of organizations. Interestingly, comparative studies on the relationship between directors’ observable characteristics and market-level financial performance in Nigeria and South firms are relatively scanty. Consequently, a gap in the literature exists, which this study sought to fill. The import of this study lies in the fact that it offered a comprehensive understanding of whether directors’ observable characteristics significantly contributes to market-level financial performance in Nigeria and South Africa.
2 REVIEW OF RELATED LITERATURE

2.1 MARKET-LEVEL FINANCIAL PERFORMANCE

Financial performance has been viewed from two perspectives: firm-level and market-level performance. In this study, emphasis was on market-level performance (such as Tobin’s Q and market-to-book value); the variables of market-level financial performance as briefly discussed as follows:

2.1.1 Tobin’s Q

Tobin's Q (also known as q-ratio and Kaldor's v) is a market-based evaluation of business value that compares the market value of a physical asset to its replacement value. Nicholas Kaldor first proposed Tobin's Q in 1966; however, James Tobin popularized it ten years later. Tobin's-q would be 1.0 if the market value of a business only represented its registered assets. If Tobin's-q exceeds 1.0, the market value of the company exceeds the value of its recorded assets as determined by Tobin and Brainard (1976). This implies that some unmeasured or unrecorded corporate assets are reflected in the market value. High Tobin's-q values encourage businesses to increase their capital investments because the assets are "worth" more than the purchase price. The present price of capital assets as determined by accountants or statisticians and the market value of equities and bonds are the two variables that Tobin's q measures.

2.1.2 Market-to-Book Value (MBVR)

The book value of a firm refers to the amount of money a firm can practically expect if it sells all of its assets at current market price. In other words, when a firm liquidates all of its assets and pay-off all its debts, the outstanding value would be the firm’s book value.

According to Tobin and Brainard (1976) cited by Nzimakwe (2021), the market-to-book value (MBVR) is a market-level performance ratio for assessing the market value of firms and their contribution to the aggregate market capitalization. MBVR is derived by dividing the market price per share by book value per share (Sobhan 2021; and Ahmad, Sadiqa & Khan, 2021).
Over the years, MBVR has been widely preferred and used by market analysts and value investors. Conventionally, any MBVR rating below 1.0 is regarded as positive, indicating a company's shares may be undervalued on the stock market. Similarly, a high MBVR value may indicate an overvalued stock. It is a broader way of describing MBVR it can be seen as a comparison of a firm's market capitalization, or market value to its book value.

2.2 DIRECTORS’ OBSERVABLE CHARACTERISTICS

In this study, two (2) directors’ observable characteristics (board independence and gender diversity) were employed and they are briefly discussed as follows:

2.2.1 Board Independence (BI)

Board independence (BI) is one of the major attributes of effective corporate governance. Jouirou and Mohamed (2014) pointed that BI is a percentage of the proportion of outside directors to the aggregate directors on the board. BI refers to a corporate board with bulk of outside directors (Akinwunmi, Jelil & Ayooluwa, 2019; and Arumona, Erin, Onmony & Omotayo, 2019). Brahama, Nwafor and Boateng (2019) noted that the interests of shareholders are considerably protected by external directors than internal directors because they beget more skills and knowledge to the firm, hence increasing the expertise needed for strategy implementation.

For independent directors to carry out their obligations, they should be allowed to be free from management’s influence (Fama & Jensen, 1993). Ososuakpor (2022) observed that a firm with high proportion of independent board members will lead to efficient monitoring and those with high proportion of non-executive directors will possess powers to ensure that management discloses accurate information relating to the performance of the firm. Besides, BI is envisaged as an avenue to offer firms with skills, expertise and prestige.

In relation to the agency problem, the presence or existence of BI helps in the monitoring and control of self-seeking interest of management (Jensen & Meckling, 1976; Lunkes, Pereira, Andrade dos Santos & Silva da Rosa, 2019. Ştefanescu (2013) stated that BI is a means premeditated to assist and resolve problems that may exists between management and owners of wealth. Patelli and Prencipe (2007) showed that the existence of BI will contribute significantly to increasing the numbers of voluntary disclosure. Again, BI leads to lessening the
agency conflicts between management and wealth owners by ensuring that voluntary disclosure of relevant and reliable information in annual financial reports of firms.

Holm and Scholer (2010) noted that BI leads to increased accountability, transparency, monitoring and integrity of information disclosed in financial statements. Hence, efficient monitoring of the board by independent directors moderates agency costs (Fama, 1980). The fact that independent directors are on the board does not assure efficient corporate governance; however, it offers a superior quality to board's decisions-making (Imasuen, Okoro & Yahaya, 2022; Saidu, 2019; and Oyedokun, 2019).

2.2.2 Board Gender Diversity (BGD)

Over time, the board of most firms have been subjugated by male executives. A board with female directors is more probable to integrate the interests of stakeholders and their performance-based interests (Imasuen, et al 2022). Board gender diversity (BGD) is one of the contentious issues in corporate governance. Dutta and Bose (2006) see BGD as the presence of females on the board. Similarly Ekadah and Mboya (2012) referred to BGD as the presence or additions of female directors on the board. Corporate organizations have realized that the existence of females on a board is a vital driver of good governance practices aimed at promoting relevance, confidence and transparency in financial reports (Marinova, Plantenga & Remery, 2010).

Ososuakpor (2022) claimed that the social-fit for top managers is a prime decisive factor for the selection of board members. In Nigeria, most corporate boards are dominated by males with few females progressing to higher positions in the board (Fakeye, George & Owoyemi, 2012). For instance, female board members find it cumbersome to successfully attain the position of a director perhaps due to discrimination, marginalization and poor implementation of the gender equality regulation. Due to the lack of support for gender equality, there had been an unpretentious variation in the representation of females on the boards of publicly traded firms in Nigeria.

Furthermore, to mitigate the gender imbalance in Nigeria, the apex bank (Central Bank of Nigeria: CBN) joined the league by imposing a mandatory quota/blend in the composition between males and females on the board of publicly quoted firms. The purpose of which was to enhance females representation on the board of firms to 40% in top management positions. This according to Ososuakpor (2022) has further helped in increasing female representation on the board of publicly quoted firms in Nigeria.
According to Ososuakpor (2022), the presence of female directors on the board will make the board to keep an eye on the chief executive officer’s (CEO) roles and performance of the firm as well. Another justification for aiming for a more diverse board of directors is that if only men are considered as potential board members, the board will be chosen only from predetermined distribution of qualification which generally implies a much lower quality than if the members are chosen from the best distribution of men and women (Singh, 2008; and Moraes, Ribeiro, Carvalho & Silva, 2022). Additionally, vague and impartiality in the selection process of the board of directors has further made male board members to dominate the board of directors (da Silva, Kasper, Brizolla, Brum, Baggio & Sausen, 2023).

2.3 THEORETICAL FRAMEWORK

The agency theory was the theoretical anchorage of this study. The agency theory was initiated by Jensen and Meckling in 1976 and they were the first to offer a comprehensive account of the theory (Jensen and Meckling as cited in Clarke, 2004). The ground behind the theory was that firms are controlled and directed by the board of directors on behalf of the wealth owners (Clarke, 2004). On this note, wealth owners entrust the power on the board to act in their interests. Impliedly, wealth owners expect financial gains or better performance. However, due to variation in ownership controls, there is the possibility of conflicts of interests. The difference between the agent and governance mechanism is that management run the firm while governance ensues that the activities of the firm are well managed (Dey, 2008).

Consequently, corporate governance dilemma occurs for two vital reasons: either due to clash of interest between management (insiders) and wealth owners or the contract between management and wealth owners cannot settle the agency problem. More so, with efficient corporate governance or board of directors, conflicts of interests can be resolved (Barako, Hancock, & Izan, 2006; and Hassan, Giorgioni, Romilly & Power 2009). Jensen (2001) posited that the agent and principal conflicts will persist if the board of directors is imperceptibly composed. The proponents of agency theory believed that having a suitably composed board (a balance of males and females on the board, jointly with independent board of directors), it would mitigate and resolve the agency conflict, hence increasing the financial performance of firms.
3 METHODS

This study used the *ex-post facto* design via cross-sectional study covering a period of 2012-2021. The study focussed on two countries: Nigeria and South Africa. Companies publicly listed on Nigerian Exchange Group (NGX) and Johannesburg Stock Exchange (JSE). Variables examined were directors’ observable characteristics (board gender diversity and board independence) and market-level financial performance (Tobin’s Q and market-to-book-value).

The study population comprised publicly quoted firms on the Nigerian Exchange Group (NGX) and the Johannesburg Stock Exchange (JSE) as of 31st December 2021. Given the large sample size of the study, a total of 111 companies on the NEG and 164 firms on the JSE were sampled. The data were obtained from the financial statements of the publicly quoted companies on the NGX and JSE. The study adjusted the Darmad model and the following models of the study were formulated:

\[
FP = f(bi, bgd, ccg) \quad (1)
\]

\[
FP = (Tobin Q, mbvr) \quad (2)
\]

Substituting equation (1) into equation (2)

\[
Tobin Q & mbvr = f(bi, bgd, ccg) \quad (3)
\]

Equation (3) was disaggregated as follows:

\[
Tobin Q = f(bi, bgd, ccg) \quad (4)
\]

\[
Mvbr = f(bi, bgd, ccg) \quad (5)
\]

Incorporating the element of cross-sectionalism of the research design into the study, we have the following models:

\[
Tobin Q_{ij} = f(bi_{ij}, bgd_{ij}, ccg_{ij}) \quad (6)
\]

\[
mvbr_{ij} = f(bi_{ij}, bgd_{ij}, ccg_{ij}) \quad (7)
\]
Where:

\( i \) is firm(s) in Nigeria and \( j \) is firm(s) in South Africa

Stating equations 6-7 in econometric form, we have the following models:

\[
\begin{align*}
Tobin Q_{ij} &= \delta_0 + \delta_1 b_{ij} + \delta_2 bgd_{ij} + \delta_3 ccg_{ij} + u_t \\
mvbr_{ij} &= \beta_0 + \beta_1 b_{ij} + \beta_2 bgd_{ij} + \beta_3 ccg_{ij} + u_t
\end{align*}
\]

Where \( mvbr \) = market-to-book value ratio, \( Tobin Q \) = Tobin’s Q, \( bi \) = board independence, \( bgd \) = board gender diversity, \( ccg \) = changes in codes of governance; \( u_t \) = Error Term.

### Table 1

*Variables Measurement*

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Market-Level Financial Performance</td>
<td>Tobin’s Q: Market Value divided by Total Assets of the firm</td>
</tr>
<tr>
<td></td>
<td>(Dependent Variable)</td>
<td>Market-to-book-value: Market Price Per Share divided by Book Value Per Share</td>
</tr>
<tr>
<td>2</td>
<td>Directors’ observable characteristics</td>
<td>Board Independence: Proportion of Non-Executive Directors to Executive Directors</td>
</tr>
<tr>
<td></td>
<td>(Independent Variable)</td>
<td>Board Gender Diversity: Total Number of Females on the Board divided by Total Board Size</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

Furthermore, data obtained in the study were analyzed using descriptive, diagnostics and inferential statistical techniques and data obtained were analyzed by means of STATA 13.0.

### 4 RESULTS AND DISCUSSION

#### Table 2

*Summary of Descriptive Statistics (Nigeria)*

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Tobin Q</th>
<th>MVBR</th>
<th>BI</th>
<th>BGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.225</td>
<td>0.085</td>
<td>67.30</td>
<td>13.22</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.156</td>
<td>0.565</td>
<td>13.20</td>
<td>11.99</td>
</tr>
<tr>
<td>Min. Value</td>
<td>-0.310</td>
<td>-117.1</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Max. Value</td>
<td>11.3</td>
<td>103.9</td>
<td>94.44</td>
<td>66.67</td>
</tr>
<tr>
<td>Skewness</td>
<td>3.739</td>
<td>-23.81</td>
<td>-0.186</td>
<td>0.802</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>20.95</td>
<td>594.5</td>
<td>2.454</td>
<td>3.443</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)
Table 2 showed that Tobin’s Q has the highest average with a value of 1.1225 (in terms of market-level performance indicator) and this was followed by board independence (bi) (in terms of directors’ observable characteristics). Also, mbvr, bgd, bi and ccg recorded averages of 0.085, 67.3 and 13.22 respectively. The high mean value for bi is a clear indication that there is a 67 per cent of the number of non-executive directors to executive directors on the board. More so, the other directors observable characteristics(bg) imply that there is an average of 13% of women directors on the board (bgd).

The minimum values for bgd is zero (0); an indication that some sampled firms in Nigeria and South Africa do not have a blend of male and female in their board. The skewness value for mbvr (-23.81) and bi (-0.186) is negative; indicating that they moved in opposite direction from bgd and Tobin’s Q (Tobin Q = 3.739; bgd = 0.802). The kurtosis values for bi is < 3 (mesokurtic – a standard normal distribution), implying that board independence would result in increased tremendous positive events (market-level performance) while the other variables Tobin’s Q, mbvr and bgd are > 3 (leptokurtic), suggesting that the variables would result in a greater chance of extreme negative events (market-level performance) for the sampled firms in Nigeria.

Table 3
Summary of Descriptive Statistics (South Africa)

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Tobin Q</th>
<th>MVBR</th>
<th>BI</th>
<th>BGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.774</td>
<td>3.375</td>
<td>70.33</td>
<td>19.10</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>4.032</td>
<td>10.15</td>
<td>11.44</td>
<td>12.62</td>
</tr>
<tr>
<td>Min. Value</td>
<td>-0.540</td>
<td>0.010</td>
<td>36.36</td>
<td>0</td>
</tr>
<tr>
<td>Max. Value</td>
<td>67.97</td>
<td>203.6</td>
<td>100</td>
<td>66.67</td>
</tr>
<tr>
<td>Skewness</td>
<td>11.57</td>
<td>11.38</td>
<td>-0.374</td>
<td>0.479</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>161.5</td>
<td>165.7</td>
<td>2.757</td>
<td>3.143</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

Table 3 showed that mvbr has the highest average with a value of 3.375 (in terms of market-level performance) and this was followed by board independence (bi) (in terms of directors’ observable characteristics. Also, Tobin, bgd and bi recorded averages of 1.774, 19.10 and 70.33 respectively. The high mean value for bi is a clear indication that there is a 70 per cent of the number of non-executive directors to executive directors on the board. Besides, the other directors’ observable characteristics (bgd) imply that there is an average of 19% of women directors on the board (bgd).

Furthermore, the minimum value for directors’ observable characteristics (bgd) is zero (0); an indication that some sampled firms’ had exclusion of women directors on the board.
The skewness values for all the market-level performance indicators (tobinq, and mbvr) were positive; indicating that they moved in the same direction with bgd except bi. The kurtosis value for bi is < 3 (mesokurtic – a standard normal distribution), implying that board independence would result in increased tremendous positive events (market-level performance) while the other variables tobinq, mbvr, and bgd are > 3 (leptokurtic), suggesting that the variables would result in a greater chance of extreme negative events (market-level performance) for the sampled firms in South Africa.

**Table 4**

*Pearson Correlation Matrix*

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Tobin Q</th>
<th>MVBR</th>
<th>BI</th>
<th>BGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobin's Q</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MVBR</td>
<td>0.1510</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>0.0663</td>
<td>-0.0006</td>
<td>1.00000</td>
<td></td>
</tr>
<tr>
<td>BGD</td>
<td>0.0184</td>
<td>0.0218</td>
<td>-0.1681</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

Table 4 showed that mbvr and tobinq positively correlate with the directors’ observable characteristics. This suggests that there is a positive relationship between the market-level performance indicators (mbvr and tobinq) and the directors’ observable characteristics. The correlation coefficients showed that no two directors’ observable characteristics were perfectly correlated for the sampled firms in Nigeria and South Africa since none of the coefficients were above 0.8 (Gujarati, 2003 cited in Okoro, 2014; Okoro & Ekwueme, 2021; Imasuen, Okoro & Yahaya, 2022); hence, there is absence of multicollinearity problem in the empirical model of board of directors’ observable characteristics and market-level financial performance.

**Table 5**

*Variance Inflation Factor (VIF)*

<table>
<thead>
<tr>
<th>Statistics</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGD</td>
<td>1.09</td>
<td>0.9147</td>
</tr>
<tr>
<td>BI</td>
<td>1.08</td>
<td>0.9262</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.09</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

The mean VIF in Table 5 is 1.09 and is not above the accepted mean VIF level of 10, suggesting the nonexistence of multicollinearity problems in the empirical model of the directors’ observable characteristics and market-level financial performance in Nigeria and South Africa. Hence, the panel dataset is reliable for conducting statistical inferences.
Table 6

Fixed and Random Effects Regression for Directors’ Observable Characteristics and Market-Level Financial Performance (Tobin’s Q) in Nigeria and South Africa

<table>
<thead>
<tr>
<th>Dependent Variable: Tobin’s Q (tobinq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimator(s)</td>
</tr>
<tr>
<td>Fixed Effect (FE)</td>
</tr>
<tr>
<td>Variable(s)</td>
</tr>
<tr>
<td>Coefficient</td>
</tr>
<tr>
<td>Bgd</td>
</tr>
<tr>
<td>Bi</td>
</tr>
<tr>
<td>_cons.</td>
</tr>
<tr>
<td>F-value</td>
</tr>
<tr>
<td>F-Probability</td>
</tr>
<tr>
<td>R-Squared (within)</td>
</tr>
<tr>
<td>R-Squared (between)</td>
</tr>
<tr>
<td>R-Squared (overall)</td>
</tr>
<tr>
<td>Wald Ch2(2)</td>
</tr>
<tr>
<td>Prob. Ch2</td>
</tr>
<tr>
<td>Hausman Test</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

Using the RE results in Table 6, the coefficients are -0.002(bgd) and -0.011(bi); this implies that the sampled firms in Nigeria and South Africa directors’ observable characteristics (bgd, and bi) will lead to about -0.2% and -1.1% changes in Tobin’s Q. Besides, the directors’ observable characteristics and market-level financial performance measure of tobinq were significant for both FE (F=7.48; F-Prob. =0.0000< 0.05), and RE (Wald Ch2(2) = 39.87; Prob.Ch2 = 0.0000 < 0.05) at 5% significance level.

Furthermore, the t-test results of bgd(-0.51) and bi(2.21) showed that the individual directors’ observable characteristics are statistically significant (bi) in explaining the influence on tobinq, except bgd that is statistically insignificant. Nevertheless, the overall R2 is 0.0148 for RE, which is higher than the overall R2 for FE (0.0140); impliedly, all the directors’ observable characteristics jointly explained about 1.48% variation in tobinq. The result of Hausman test (Prob>Chi2= 0.128 > 0.05) suggests that RE is more efficient than FE. Consequent upon the above, the Wald Ch2of RE is = 38.87 (p-value=0.0000 < 0.05) and is significant, providing evidence that directors’ observable characteristics has significant effects on market-level financial performance (Tobin’s Q) in Nigeria and South Africa.
### Table 7

**Fixed and Random Effects Regression for Directors’ Observable Characteristics and Market-Level Financial Performance (Market-to-Book Value) in Nigeria and South Africa**

<table>
<thead>
<tr>
<th>Dependent Variable: Market-to-Book Value (mbvr)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimator(s)</strong></td>
<td><strong>Fixed Effect (FE)</strong></td>
<td><strong>Random Effect (RE)</strong></td>
</tr>
<tr>
<td><strong>Variable(s)</strong></td>
<td>Coefficient</td>
<td>Probability</td>
</tr>
<tr>
<td>Bgd</td>
<td>0.033</td>
<td>0.482</td>
</tr>
<tr>
<td></td>
<td>(0.70)</td>
<td></td>
</tr>
<tr>
<td>Bi</td>
<td>-0.026</td>
<td>0.581</td>
</tr>
<tr>
<td></td>
<td>(-0.55)</td>
<td></td>
</tr>
<tr>
<td><em>cons.</em></td>
<td>1.903</td>
<td>0.621</td>
</tr>
<tr>
<td></td>
<td>(0.49)</td>
<td></td>
</tr>
<tr>
<td>F-value</td>
<td>1.410</td>
<td></td>
</tr>
<tr>
<td>F-Probability</td>
<td>0.2055</td>
<td></td>
</tr>
<tr>
<td>R-Squared (within)</td>
<td>0.0032</td>
<td></td>
</tr>
<tr>
<td>R-Squared (between)</td>
<td>0.0306</td>
<td></td>
</tr>
<tr>
<td>R-Squared (overall)</td>
<td>0.0023</td>
<td></td>
</tr>
<tr>
<td>Wald Ch2(2)</td>
<td>6.27</td>
<td></td>
</tr>
<tr>
<td>Prob. Ch2</td>
<td>0.3933</td>
<td></td>
</tr>
<tr>
<td>Hausman Test</td>
<td>Chi2(2) = 3.62</td>
<td>Prob&gt;Chi2= 0.7284</td>
</tr>
</tbody>
</table>

Source: Authors’ Compilation, (2023)

Using the RE results in Table 7, the coefficients are 0.027(bgd) and -0.031(bi), indicating that the sampled firms in Nigeria and South Africa directors’ observable characteristics (bgd and bi) will lead to about 0.27% and -0.03% changes in market-to-book value (mbvr). Besides, the directors’ observable characteristics and market-level performance measure of mbvr were insignificant for both FE(F=1.41; F-Prob. =0.2055> 0.05), and RE (Wald Ch2(2) = 6.27; Prob.Ch2 = 0.3933 > 0.05) at 5% significance level.

Furthermore, the t-test results of bgd(0.59), and bi(-0.66) showed that the individual directors’ observable characteristics are statistically insignificant in explaining the effect on mbvr. The overall R2 is 0.0024 for RE, which is higher than the overall R2 for FE (0.0023); impliedly, directors’ observable characteristic jointly explained about 0.24% variation in mbvr. The Hausman test (Prob>Chi2= 0.7284 > 0.05) suggests that FE is more efficient than RE. The Wald Ch2 of RE is = 6.27 (p-value=0.3933> 0.05) and is insignificant, providing evidence that directors’ observable characteristics has insignificant effects on market-to-book value in Nigeria and South Africa.

For the firm to improve its performance at the market level, there must be efficient tactics the boardroom and management must put in place in order to realise it (Harash, et al., 2014). In this study, the role directors’ observable characteristics play in improving the market-level financial performance was investigated for both financial and non-financial firms in South Africa and Nigeria from 2012-2021. In specific two directors’ observable
characteristics namely board independence and gender diversity, two market-level financial performance indicators (Tobin’s Q and market-to-book value) were assessed.

Findings indicated that while directors’ observable characteristics had significant effects on Tobin’s Q, an insignificant effects was found for market-to-book value. This finding corroborates with the findings Ebrahim, et al (2012), Joao and Vinícius (2012); Erik and De Wet (2013) Akpan and Amran (2014); Ososuakpor (2022) that board independence and gender diversity accounts for the increase in Tobin’s Q. On the other hand, the study contradicts the results of Merve and Cemil (2016) who found that board independence and gender diversity significantly affect market-to-book-value.

6 CONCLUSION AND RECOMMENDATIONS

In the literature, there is a dearth of empirical studies that investigated whether the certain directors’ observable characteristics (like board independence and gender diversity) affect market-level financial performance of financial and non-financial firms in Nigeria and South in a single study. Consequently, to fill the lacuna in the literature, the study used a dissimilar analytical framework agency theory in explaining the relationship between the identified directors’ observable characteristics and market-level financial performance of two foremost economies in Africa Nigeria (West) and South Africa (Southern Africa).

The study found that while directors’ observable characteristics has significant effects on Tobin’s Q (market-level performance) in Nigeria and South Africa, directors’ observable characteristics do not have significant effects on market-to-book value (market-level performance) of financial and non-financial firms in Nigeria and South Africa. On the basis of the findings, it was recommended that management should engage in economic or business activities by way of investing more in capital assets or bonds to generate a high Tobin’s Q value for firms in Nigeria and South Africa.

7 POLICY SUGGESTIONS

This study only used certain directors’ observable characteristics such as board gender diversity and independence and market-level financial performance (market-to-book-value and Tobin’s Q) in assessing the relationship between directors’ observable characteristics and market-level financial performance of publicly quoted financial and non-financial firms in Nigeria and South Africa. Moreover, the study did not assess other directors’ observable
characteristics such as board political connections, diligence, size and ownership as they affect market-level financial performance. Thus, there is the need for future researches to validate the model employed by using the identified directors’ observable characteristics which were not used in this current study.

Furthermore, there are other regions in sub-Saharan Africa (e.g. East and North Africa) which were not investigated in this current study. Hence future researches should carry out an investigation of whether directors’ observable characteristics will affect market-level financial performance of firms in the above identified regions. The identified limitations were surmounted by ensuring that all financial and non-financial firms in Nigeria and South Africa were duly represented in the sample of the study for purpose of generalization.

REFERENCES


