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EFFECT OF BOARD CHARACTERISTICS ON CAPITAL STRUCTURE DECISION OF LISTED INSURANCE FIRMS IN NIGERIA

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ABSTRACT

The study examines the effect of board characteristics on capital structure decision of listed insurance firms in Nigeria. The study employed ex-post facto research design. The study covers the period of 11 years (2011-2021), with the population of 22 listed insurance firms on Nigeria Stock Exchange (NSE). Secondary data was extracted from annual report of sampled firms and random effect model used as techniques for data analysis after breusch –pagan langrangian multiplier test and Hausman test were carried out. The result indicate that independent non-executive directors and board gender diversity have positive effect on financing decision but insignificant. Also the result reveal that board size exhibit negative effect on financing decision and it is significant at 5%. Furthermore, the study showed that board members expertise exhibits a positive effect of financing decision and is significant at 5%. The study concludes that board characteristics had significant effect on financing decision. The study recommended that policy makers on corporate governance should increase the number of independent directors with transparent process of appointment and ensure mandatory increase in the ratio of female directors at the board level in other to achieve significant contribution towards financing decision of listed insurance firms in Nigeria.

KEYWORDS: financing decision, panel regression, board characteristic.

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INTRODUCTION

Capital structure decision can be described as ways in which decision are taking on either to finance business operation with external debt or equity financing. It became a crucial decision in any organization because all other decision depend on capital structure decision.

However, where cost of external debt is high, it become a risky decision to finance manager to finance company's operation with external debt because it may lead to bankruptcy if companies are

unable to fulfil debt obligation and loss of manager's job. High cost of external debt can also force managers to finance company's operation with retained earnings.

Moreover, financing decision are affected by a lot of factors including the nature of owners, composition of decision makers and the environment. The decision makers may have varied interest; this study is expected to unearth factors that affect financing decision making of listed insurance firms in Nigeria.

After corporate scandals that cut across different countries, the debate surrounding corporate governance in recent times revolves around the composition of corporate board members. Composition in terms of board size, board gender diversity, board independence and the importance of having directors with financial expertise in accounting background that will lead to better capital structure decision has been a major concern to regulators and scholars. Regulators of corporate governance has suggested the inclusion of board financial expertise in corporate board so that quality decision can be made in respect to financial decision to save companies from bankruptcy and premature liquidation.

In Nigeria, most of the previous studies carried out focus on determinant of capital structure of listed insurance firms without examining effect of board characteristic on capital structure decision of listed insurance firms, studies such as (Shehu (2012); Sani & Babagana (2020) and Mbonu & Amahalu (2021)) all examine profitability, firm size and leverage on capital structure decision. Therefore, there is need to examine the effect of board characteristic on capital structure decision of listed insurance firms in Nigeria.

Research Objective

The general purpose of this study is to examine the effect of board Characteristics on the capital structure decisions of listed insurance firms in Nigeria. Other specific objectives are to:

- i. assess the effect of the independent non-executive directors on capital structure decisions of listed insurance firms in Nigeria
- ii. examine the effect of board size on the capital structure decisions of listed insurance firms in Nigeria.
- iii. examine the effect of board gender diversity on capital decisions for listed insurance firms in Nigeria.
- iv. assess the effect of board member expertise on the capital structure decisions of listed insurance firms in Nigeria.

Research Hypotheses

The following research hypothesis is raised for the study:

Ho1: Independent non-executive director has no significant effect on capital structure decisions of listed insurance firms in Nigeria.

Ho2: Board size has no significant effect on capital structure decisions of listed insurance firms in Nigeria.

Ho3: Board gender diversity has no significant effect on capital structure decisions of listed insurance firms in Nigeria.

Ho4: Board member expertise has no significant effect on capital structure decisions of listed insurance firms in Nigeria.

2.0 LITERATURE REVIEW

Concept of Capital Structure Decision

In corporate finance, the capital structure decision is critical. Organizations need finance to finance their profitable net present value projects, and they are in the middle of either financing these projects with internal funds (retained earnings) or external funds (debt financing) for the valuable projects. The mixture of debt financing and external equity financing is known as the capital structure, and the process of using this source of finance is also known as the financing decision. Capital structure as a critical area affecting the overall operating level of corporations in the field of corporate finance and accounting (Huang, 2019).

Therefore, corporate governance practice can be viewed as a way to identify the debt-equity ratio in order to maximize shareholder value. As a result of agency conflict, there is a need for good corporate governance that will ensure optimal debt structure and protect investor interests.

According to Chalisa and Juthamon (2021), good corporate governance attributes such as board independence, board experience, and gender diversity contribute to low debt financing costs as they control the management team more strictly about debt financing. Thomas and Thomas (2014) are of the opinion that strong corporate governance and a better information environment help in monitoring management and result in lower debt reliance for firms. Albert and Agyei (2014) also concluded in their study that corporate governance and ownership structure play an important role in a firm's capital mix determination. According to Kuah and Zuriawati (2017), if the board of directors includes more independent directors, the proportion of short-term debt will decrease. They further suggest that large firms hold more short-term and long-term debt. When there is an increase in the number of members on the board, when government and regulatory bodies have strong corporate governance implications and practices, it may reduce the debt burden of the companies to bank-repay or create a negative image of the firm in the financial market.

Concept of Board Characteristics

The board of directors is seen as the primary means for shareholders to exercise control over top management because the board has an obligation to determine the firm's overall strategy and to ensure that adequate controls are in place to protect shareholder value. In terms of financial decisions, there has been serious debate as to whether corporate governance contributes to the financing decisions of corporate firms, and there have been arguments in the literature. According to Yinusa and Babalola (2012), when there is good corporate governance on capital structure decisions, there will be proper and efficient practice in the administration of business entities. They further stated that an effective governance structure on financing will lead to a reduction in the incidence of corporate failure, poor internal control systems, poor corporate structures, and indiscipline on the paths of management and workers.

Independent Non-Executive directors

The presence of an outside director, who is an independent director, may have a direct impact on the effectiveness of the board as per their power to protect the wealth of the shareholders in the form of dividend payouts and reduce the excessive use of debt to finance projects by top management, which may lead to bankruptcy. Corporate governance requires every public firm to include on their board of directors an independent director that has no stake in the company so that there will be neutral decisions on how the operation of the firm will be financed and shareholders' interests will be protected. Nigeria code of corporate governance (NCCG) 2018 describe independent director in principle⁷ as independent non-executive directors (INED) who brings high degree of objectivity to the board for sustaining stakeholder trust and confidence. Kunle (2013) has argued that the effectiveness of the independent director depends on his appointment procedure and stated further that where the appointment of the independent director is sponsored by the chairman of the board or the Chief Executive Officer (CEO) of the board, he is not likely to give any independent opinion and is not likely to oppose the suggestion of the chairman or CEO, which may lead to constraints in his input to the board. Panaqiotis (2013) argued that having independent directors on the boards of European soccer clubs reduces leverage and thus the risk of financial instability. In their findings, Muhammad et al. (2020) argue that board-independent firms are more positive on capital structure when there is a high level of gender diversity. Yee et al. (2017) stated that in Malaysia, board independent directors are an effective corporate governance mechanism for determining capital structure decisions. Nazaria et al. (2021) argued that independent directors have no relationship with capital structure decisions in Malaysia.

Board Size

Board size is the total number of directors, which includes executives, non-executive directors, and independent directors on the board of a firm. The board's effectiveness is dependent on its size and composition, and the board must not be too big as to become unwieldy and uncontrollable, which will result in time waste before a simple decision is reached (Kunle, 2013). Also, the board should not be too small that it excludes the necessary knowledge, skills, and experience needed to make effective decisions.

In American firms, board size has a negative influence on capital structure decisions (Amarijit & John, 2014). Balath et al., (2017) disagree with Ajanthan's (2013) finding that board size has no effect on the capital structure of listed firms in Sri Lanka. Also, in Pakistan, Syed and Wagas (2018) found that board size has a negative and insignificant effect on capital structure. Abeer and Ahmed (2020) discovered that board size influences capital structure decisions in Chinese real estate listed firms, which prefer long-term debt financing over short-term debt financing. Amarjit et al. (2012) found that board size influences capital structure decisions in India. Muhammad et al. (2020) found a positive impact between board size and capital structure decisions.

Sanita and Ratnam (2019) found, on the contrary, a negative relationship between board size and the capital structure of Chinese firms. A study of Nigerian listed firms found that as debt levels decrease, board size increases (Aldullahi et al., 2020; Yinusa & Balalola, 2012; Uwuigbe, 2013; & Benjamin et al., 2021).

Board Gender Diversity

Board gender diversity is considered a key factor contributing to the quality of corporate governance, and several corporate governance codes in developed countries emphasize the importance of gender diversity to avoid problems arising from like-minded individuals and enhance the effectiveness of the board and the organization at large (Ayat, 2017). According to Shakeel et al. (2020), female presence on the corporate board is good because it has benefits for internal and external stakeholders. They went on to say that female presence is more pronounced and useful in firms and markets where shareholders' rights are limited. Female directors avoid risks in policy-making, are more traditional than men, and are more humble in their decision-making (Dowling & Aribi, 2018). Benjamin et al. (2021) argue that the presence of female directors on the boards of Nigeria-listed firms has a positive influence on capital structure decisions, which translates to female directors in Nigeria preferring the use of debt to finance company operations. Abdullahi et al. (2020) support the argument of Benjamin et al. (2021) that female directors in Nigerian public companies prefer using debt financing. In Malaysia, Nazaria et al. (2021) stated that board gender has a negative influence on capital structure decisions. Also, in Egypt, Mohammed and Khairy (2016) argue that female board members prefer to use lashing debt for financing in Egyptian public firms.

Board Member Expertise

The professional expertise of corporate directors has concentrated on the presence of a particular kind of professional expert such as one in accounting, finance, law, or banking and finance (Fich, 2005). Guner et al. (2018) examine professional corporate directors' expertise as a determinant, and they found that expertise includes the presence of bankers, accountants, lawyers, consultants, and outside chief executive officers on the board. A board made up of directors with distinct commercial and professional credentials brings diverse viewpoints to their surveillance and advisory roles that would deliver satisfaction to business owners through enhanced problem solving, strategy, development, and resource utilization (Kein 1998). According to Baranchuk and Dybrg (2009), board members from diverse backgrounds could generate boardroom conflict that could delay resolution and impair communication.

In addition, Benjamin et al. (2021) report that director expertise and skills have a positive influence on capital structure decisions in Nigerian public firms, contrary to Yinusa and Babalola (2012), who earlier found a negative relationship between director expertise and capital structure decisions. Chalisa and Juthanmon (2021) also argue that a director's expertise and skills have a positive impact on capital structure decisions in Thai public companies. Muraddin et al. (2016) argue in Malaysia that increasing the number of board members leads to less use of debt, implying that the director's financial expertise has a negative impact on capital structure decisions. According to Nigeria code of corporate governance (NCCG) issue by financial reporting council (FRC) in 2018 board member expertise is describe as non-executive directors who brings a high their knowledge, expertise and independent judgement on issues of strategy and performance on the board.

Empirical Review

Mbonu and Amahalu (2021) examined effect of firm characteristic on capital structure of insurance companies listed on the Nigeria stock exchange (NSE) between 2011 to 2020. The study used

purposive sampling techniques to sample 14 listed insurance companies in Nigeria. Also, the study adopted ex-post facto research design and data were extracted from the annual report of sample firms. Data extracted were analyzed with panel least square regression and finding of their study showed that firm size, firm growth, and profitability significantly positive related to capital structure.

Daniel et al. (2021) examined the impact of corporate governance on the capital structure decisions of multinational companies in the USA. dependent variable is capital structure, and an independent variable is the corporate governance index. Other control variables included board size, board independence, CEO duality, firm size, and asset tangibility. The study adopted an ex-post facto research design and sampled all listed firms in the USA. Secondary data was extracted from the annual report of a sample firm between 1990 and 2018, and the collected data was analyzed using regression analysis. The finding shows that the corporate governance index, board size, CEO duality, firm size, and asset tangibility all have a significant negative effect on capital structure decisions, but that board independence has a positive impact on capital structure. The study did not disclose the sampling procedure's technique.

Ahmad and Aifa (2021) examine the impact of ownership structure on the capital structure of companies in Malaysia. The study sampled 46 manufacturing companies using purposive sampling, and data was extracted from annual reports from 2013 to 2016. The data was analyzed using panel regression. The result of the fixed effect model shows that managerial ownership, which has the largest shareholding, and institutional ownership have a negative influence on capital structure.

Benjamin et al. (2021) examines the effect of corporate board structure on the capital structure of companies listed on the Nigerian stock exchange from 2015 to 2019. The study sampled 93 quoted firms randomly, and data were extracted from the annual reports of the selected firms. The data were analyzed using regression. The result shows that board size has a negative influence on capital structure, while board skill and board gender have a positive influence on capital structure.

Fasua et al. (2020) examine the effect of ownership structure on capital structure from 2009 to 2019. The study adopted an ex-post facto research design. The population consisted of five agricultural firms listed on the Nigerian stock exchange. The research used census-sampling methods to take samples from the whole population. The study extracted the panel data from the annual report and used the Hausman test to choose between a random effect and a fixed effect in the regression model. The result of the random effect shows that managerial ownership and concentrated ownership have a significant influence on capital structure, while institutional ownership has a significant positive influence on the capital structure of listed agricultural firms in Nigeria.

Abdullahi et al. (2020) examined the relationship between board composition and the capital structure of listed firms in Nigeria. The dependent variable is the capital structure measure of total debt. Independent variables include board size, board independence, CEO duality, board gender, foreign directors, and firm size. The study sample included 71 listed firms, and data were extracted from the annual reports of selected firms between 2012 and 2018. A two-stage GMM model was

used to analyze the data. The result shows that board size, board independence, and CEO duality have negative influences on capital structure. In addition, board gender diversity, foreign directors, and firm size have a positive influence on capital structure.

Abdullahi (2020) examines the CEO tenure and financing decisions of listed non-financial firms in Nigeria. Dependent variables in the financing decision include total debt, short-term debt, and long-term debt. Independent variables include CEO tenure, board size, and board independent and firm size. The study sampled 63 non-financial firms. generalizes the moment method (GMM) to analyze data. The result shows that CEO tenure has a positive influence on total debt, short-term debt, and long-term debt. Board size, board independence, and firm size have negative influences on total debt, short-term debt, and long-term debt. Equity financing is not included in the financing decision.

Afshan and Aza (2020) review the impact of board structure on capital in public listed companies. Dependent variable is capital structure, and an independent variable is board size, board composition, and board tenure. The study sampled 117 listed companies on the Muscat Securities Market (MSM). Between 2016 and 2019, data were extracted from the annual reports of the selected companies. Multiple regression was used to analyze the collected data. The findings indicate that board size, board composition, and board tenure all have a positive impact on capital structure.

Sani and Babagana (2020) examined determinant of capital structure of listed insurance companies Nigeria from 2006 to 2018. The study adopted ex-post facto research design and the population of the study consist of 28 insurance companies listed as at 2018. Their study adopted census to sample all the population. Data for the study was extracted from the annual report of selected listed insurance firms. Data extracted was analyze with random model after Hausman test and finding of their study showed that firm size, firm age and tangibility are positively related to capital structure.

Sunitha and Ratnam (2019) examined the effect of corporate governance on the capital structure decisions of listed Chinese companies. Dependent variables are capital structure and corporate governance, which include managerial ownership, foreign investors, board size, state-owned ownership, and legal person shares. Data for the study were extracted from annual reports from 2005 to 2010, and the data were analyzed with GMM. These findings show that managerial ownership, state-owned ownership, legal persona, and board size have a significant positive effect on capital structure, but a foreign investor has the opposite effect. The study did not disclose the sample procedure, and the time frame of 5 years covered is too short. Uwuigbe (2013) examines the effect of board size and CEO duality on the capital structure of listed firms in Nigeria. The sample for the study consisted of 40 listed firms, and data were collected from selected firm annual reports for the period of 2008 to 2011. The collected data was analyzed using a regression model. The result of the study shows that there was a significant negative relationship between board size and capital structure but a significant positive relationship between CEO duality and capital structure

Shehu (2012) examined determinant of capital structure of listed insurance firms using data obtained from annual report of sample firm between the period of 2001 to 2010. Data was extracted

from the annual report of sample listed insurance firms and data extracted was analyze with multiple regression. Finding of this study showed that firm size, firm age, firm growth, profitability and tangibility are positively related to capital structure. Variable such as board size, board diversity, board member diversity and board independent was not examined on capital structure of listed insurance firms in Nigeria which this study intend to close the gap

Yinusa and Babalola (2012) examine the impact of corporate governance on the capital structure of listed food and beverage companies in Nigeria. A dependent variable is capital structure, and independent variables include board size, outside directors, board skills, and CEO duality. The study used an ex-post facto research design, with a sample of foods and beverages listed on the Nigerian stock exchange. Secondary data were extracted from the annual reports of sample companies between 2000 and 2009, and the collected data was analyzed using panel regression. Using the Hausman test, the study used a fixed effect regression model, and the result shows that board size, board composition, and CEO duality are negatively related to capital structure, but on the contrary, board skills are positively related to capital structure.

Theoretical framework

The theories that underpin this study is trade off theory and peck-order theory

Trade of Theory

Trade-off theory was developed in 1958 by Modigliani and Miller based on the choice between debt and equity in the capital structure decisions of firms. They contend that firms seek debt financing because of the tax benefits, which may increase the firm's value. According to Myers (1984), firms set a target debt-to-equity ratio and gradually move towards achieving the firm target. This theory indicates that firms prefer debt financing as a way of enhancing their profits. Jensen (1976) is of the opinion that firms use debt financing to mitigate against agency conflict and reduce agency costs. Jensen (1986) also stated that when an organization uses debt financing, the debt holder will strictly monitor top management on the prudent use of debt for the firm's growth. According to Nazaria et al. (2021), managers might be tempted by the interest tax shields of debt financing and use the debt intensively at the expense of shareholders when the managerial shareholding is lower. However, managers will use less debt as the risk of bankruptcy increases.

In capital structure decisions, the cost of financial distress is eliminated by the tax advantage of using debt financing. Myer (2001) concluded that the level of marginal value of tax shields, which can entirely offset the financing cost, is a way to decide the level of debt that a firm can borrow. The tradeoff theory is a link between the tax advantage (tax shield) and the cost of financial stress, agency costs, and bankruptcy costs, which define the best level of capital structure decision. However, there is a need to examine the link between board characteristic and capital structure decisions, and more importantly, how various interests on the boards of listed insurance firms in Nigeria influence capital structure decision

Pecking order Theory

Myers and Majluf (1984) develop the pecking order theory based on the assumption that companies choose their capital structure based on their preference for retained earnings, debt financing, and

equity financing. The assumption was based on two propositions: the first is that managers of firms have asymmetric information regarding retained earnings and the issuing of equity, and the second is that managers work for the best interests of their shareholders. Their theory stated that where firms have sufficient funds, they use internal funds such as retained earnings, but where there is not sufficient internal funding, they source external funds, which include debt financing and equity financing. Ahmad and Aifa (2021), the presence of asymmetric information will trigger the firm to use internal financing over other financing options and give least preference to equity financing. However, the presence of managerial ownership, which receives timely and accurate information compared to an outside director, can make this manager act and make decisions on behalf of the minority shareholders by following the sequence of financing decisions. The pecking order theory of Myers and Majluf (1984) also suggests that firms that issue shares at a lower market price choose equity financing over other sources of financing. This study adopts theory to decide whether members of the boards of listed insurance firms in Nigeria will choose either an internal fund (retained earnings) or debt financing to finance their investment

3.0 Methodology

The study adopts ex-post facto research design due to the data are already in existence and the phenomenon in the study is an event that has happened in the past. The study population comprises of 22 listed insurance companies on the Nigeria Exchange Limited (NGX) as at December 2021. The study uses secondary source of data. The data collected were extracted from the annual report of listed insurance firms in Nigeria between the period of 2011 to 2021. Data extracted from annual report of listed insurance firms is subject to various statistical techniques. Firstly, diagnosis test is carried out to determine the fitness of the data for panel data regression. The diagnostic test carried out include heteroskedasticity test and multicollinearity test. In addition, descriptive statistic, correlation matrix and panel regression is carried out with the help of STATA version 14. Breush and Pagan Lagrangian multiplier Test is used to decide between pool OLS and random effect model and hausman Test was further used to decide between random effect model and fixed effect model.

Variable Measurement

Table 3.1 Variable Measurement

Variable	Measurement	Sources
Capital structure Decision	Total debt / Total Asset	Benjamin et al., (2021) and Fasua et al., (2020)
Independent non-executive directors	The Number of independent non- executive directors	Kunle (2013), Abdullahi, et al., (2020) and Daniel et al.,(2021)
Board Size	The number of directors on the board	Afshan and aza(2020) and Uwuigbe (2013)
Board Gender Diversity	The number of female directors to total number of directors	Abdullahi, et al.(2020) and Emma et al., (2019)
Board Member Expertise	The total number of directors	Benjamin et al., (2021),

	with specialization in accounting, finance and business on the board	Yinusa and Babalola(2012) and Nauman and Qaiser (2019)
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Source: Researcher's Field Work 2023

Model Specification

The model for this study is written as follows:

$$CSTRD_{it} = \beta_0 + \beta_1 INED_{it} + \beta_2 BZ_{it} + \beta_3 BGD_{it} + \beta_4 BME_{it} + \varepsilon$$

Where:

CSTRD= capital structure decision

INED= independence non-executive directors

BGD= board gender diversity

BME= board member expertise

4.0 Result and discussion

Descriptive statistics

Table 4.1: Descriptive statistics describes the summary statistics which include mean, standard deviation, minimum and maximum value of variable in the study.

Variables	Mean	Standard Deviation	Minimum	Maximum
CSTRD	0.64	0.264005	0.05	0.96
BIZ	9.31	2.286308	4	17
BME	4.31	1.516346	2	8
BGD	0.15	0.1276419	0	0.09
INED	1.48	0.5329897	1	3

Researcher's computation (2023)

Descriptive statistics result in table 4.1 reveal that the average percentage of capital structure decision is 0.64% ranging from minimum of 0.05% and maximum of 0.96%. The average board size (BIZ) is 9.30 ranging from minimum member of 4 and maximum of 17. Average board member expertise (BME) is 4.31 ranging from minimum board member expertise (BGD) of 2 and maximum of 8. The average percentage of board gender density (BGD) is 15% ranging from minimum of 0% and maximum of 9% and the average number of independent non-executive director (INED) is 1.48 ranging from minimum member of 1 and maximum of 3. The standard deviation of CSTRD is 0.264, BIZ 2.286, BME 1.516, BGD 0.127 and BID 0.532.

Correlation matrix

Correlation coefficient is a measure of linear association between two variables. A positive correlation coefficient of +1 indicates that two variables are perfectly related in positive linear sense and a negative correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense.

Table 4.2 Correlation Matrix

	CSTRD	INED	BIZ	BGD	BME
CSTRD	1				
INED	0.0740	1			
BIZ	-0.1439	0.2.92	1		
BGD	0.0931	0.1289	0.02061	1	
BME	- 0.1303	0.1589	0.7 629	0.03121	1

Source: research computation (2023)

Table 4.2 shows the correlation matrix result indicates that capital structure (CSTRD) has a positive coefficient of -0.1439 with board size (BIZ). Also, there is a positive relationship between financing decision and board gender diversity (BGD) at a coefficient of 0.0931 but negative relationship with board member expertise at a coefficient -0.1303. In addition, the evident from the above table indicate that the magnitude of correlation among the explanatory variable which INED, BIZ, BGD and BME Indicate no severe multicollinearity Problems in the study because the highest correlation coefficient is 0.76.

Panel Regression Assumption Test

Regression assumption test carried out include unit root test, multicollinearity test, and Heteroskedasticity test.

Multicollinearity test

Multicollinearity test statistics is presented in table 4.3 The statistical problem of multicollinearity is addressed is among independent variable using variable inflation factor (VIF). The result of the (VIF) indicate that none of the independent variable is greater than 10 which means there is absence of multicollinearity among explanatory variable.

Table 4.3 variance inflation factor (VIF) test

Variable	VIF	Tolerance
BIZ	2.44	0.409766
BME	2.39	0.417669
INED	1.06	0.940699
BGD	1.02	0.982765
Mean VIF	1.73	

Sources: Research Computation (2023)

Heterskedasticity Test

Breusch- pagan/cook-Weisberg for Heteroskedasticity

HO: Consonant Variance

Variable: Fitted Values of CSTRD

CH129 (1) = 21.70

Prob > chiz = 0.1922

The result of breush-pagan/cook-weisberg shown in table 4.2.3 t-statistic 1.70 and p-value 0.1922. Since P- value is greater than 0.05, the null hypothesis is accepted which indicate there is absence of Heteroskedacity in the data

Panel Regression Result

Table 4.4 Panel Regression Result

Variables	Pool OLS	Random effect	Fixed effect
Dependent variable	CSTRD	CSTRD	CSTRD
C	0.7233 (0.000)	0.6841 (0.000)	0.6797 (0.000)
INED	0.0484 (0.038)	0.3224 (0.183)	0.0301 (0.021)
BIZ	-0.0145 (0.005)	-0.0170 (0.028)	-0.0173 (0.001)
BGD	0.1752 (0.007)	0.0678 (0.576)	0.0493 (0.038)
BME	-0.0090 (0.007)	0.0146 (0.001)	0.0176 (0.038)
R2	0.6001	0.6350	0.3597
ADJ R2	0.4039	0.5244	0.3885
F-Statistics	2.47 (0.0451)	4.80 0.0088	13.12 0.0000

Breush and Pagan Lagrangian multiplier Test	Chibarz (01) 306.44 Prob > Chibarz = 0.0000		
Hausman Test	0.8679		

Source: researches compilation (2023) significant at 5%

Table 4.4 result show that breush and pagan lagrangian multiplier test is carried out to decide between random effects and pool OLS. The p-value 0.0000 simply null hypothesis is rejected and random effect model is considered. Furthermore, Hausman test is carried to decide between fixed effect model and random effect model and the result of Hausman test statistics (0.8679) implies that the correlation between the unobserved variables and the error term is not significant to undermine our estimation result; therefore, the random effect panel estimation result is accepted.

On the random effect model, the result revealed that adjustment R2 is 0.5244 which suggest that board characteristics explain 52% of systematic variation in financing decision of listed insurance firms in Nigeria. The F-stat 4.80 and p-value (0.008) indicate that there a significant linear relationship between financing decision and board characteristics at 1% level.

The result shows that independent non-executive directors (INED) exhibit positive effects (0.3224) on financing decision (CSTRD) and insignificant (0.183) at 5% level. Also, board size (BIZ) has a negative effect (-0.0170) on financing decision (CSTRD) and significant (0.028) at 5% level, board gender diversity (BGD) exhibit positive effect (0.0678) on financing decision (CSRTD) and insignificant (0.576) on financing decision at 5% level. Finally, board member expertise exhibits positive effects (0.0146) and statistically significant (0.001) at 1% levels.

Hypotheses Testing and Discussion of Findings

The discussion of the result is based on the random effects estimation in table 4.4. The result are discussed below;

Independent non-executive directors and capital structure decision

the result shows that INED exhibit positive effect on capital structure decision (CSTRD) and is statistically insignificantly at 5% level. This suggests that increase in independence director will lead to increase in debt financing of listed insurance firms in Nigeria. Based on the statistically insignificant (0.183), the null hypothesis HO1 is accepted, that independent non-executive director has no significant effect on financing decision of listed insurance firms. This finding was inconsistent with the study of Abdullahi in (2020) and Abdullah et al (2020) who found that independent non-executive director had negative effect on financing decision of non-financial listed firms in Nigeria

Board size and Capital Structure Decision

The result revealed that board size (BIZ) exhibit a negative effect on capital structure decision and is statistically significant 5% level. This implies that an increase board size of listed insurance firms in Nigeria will lead to decrease in capital structure.

Based on the statistically significant (0.028) we reject the null hypothesis H_{02} , that board size has no significant effect on capital structure decision of listed insurance firms in Nigeria. This finding is consistent with the study of Abdullah et al (2020) in Nigeria and Daniel et al (2020) in USA who found that board size had negative effect on capital structure decision of listed firms.

Board gender diversity and capital structure decision

The result shows that board gender diversity (BGD) has a positive effect on capital structure decision but insignificant at any level. This simply means an increase in board gender diversity will lead to increase in capital structure decision of listed insurance firms in Nigeria. Based on the statistically insignificant, we accept the null hypothesis H_{03} , that board gender diversity has no significant effect on capital structure decision of listed insurance firms in Nigeria. The finding of this study is consistent with the study of Benjamin et al., (2021) who found that board gender diversity has positive effect on capital structure decision of listed firms in Nigeria.

Board member expertise and capital structure decision

The result shows board members' expertise has a positive effect on capital structure decision and is statistically significant at 1% level. This implies that an increase in the board members with expertise skill in finance will lead to increase in capital structure decision of listed insurance firms in Nigeria. Based on the statistically significant at (0.001) the null hypothesis H_{04} is rejected that board member expertise has no significant effect on capital structure decision of listed insurance firms in Nigeria. This finding is consistent with the study of Benjamin et al., (2021) and Yunusa and Bababola (2012) who found that board member's expertise had a positive effect on capital structure decision of listed firms in Nigeria.

5.0 Conclusion and Recommendation

The following conclusions are drawn based on the findings of the study.

The study concludes that board independence director has no significant effect on capital structure decision of listed insurance firms in Nigeria.

Similarly, board gender diversity has no significant effect on capital structure decision of listed insurance firms in Nigeria.

Furthermore, it was concluded that board members' expertise has a significant effect on capital structure decision of listed insurance firms in Nigeria.

Finally, it was concluded that board characteristic has a significant effect on financing decision of listed insurance firms.

The following recommendations were drawn based on the conclusion of the study

Policy maker on corporate governance should increase the number of independent non-executive directors and the process of engaging independent non-executive directors should be transparent so that their decision can be significant.

Also policy makers of corporate governance should mandate a particular ratio of female directors at the board level in order to ensure a significant contribution towards capital structure decision of listed insurance of firms in Nigeria. Shareholder should ensure that large number of executive and non-executive members of the board have special financial skills in terms of education background in order to ensure that members of the take professional decision in terms of capital structure decision for listed insurance firms in Nigeria.

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