TSU-International Journal of Accounting and Finance (TSUIJAF)
e-ISSN: 28811-2709, p-ISSN: 28811-2695.Volume 3, Issue 1 (March, 2024).

BOARD ATTRIBUTES, AUDIT COMMITTEE AND FIRM VALUE OF LISTED CONSUMER GOODS COMPANIES IN NIGERIA

Ahmed Abdulaziz Musa[1], Abubakar Yusuf[2] & Ahmed Ishaku[3]

[1,2&3] Department of Accounting Gombe State University, Nigeria.

Abstract

The main objective of this study is to determine the moderating effect of Audit committee on the relationship between board attributes and firm value of the listed consumer goods companies in Nigeria. Expost facto research design was used and data were extracted from the annual reports and accounts of the fifteen (15) sampled consumer goods companies out of the 21 companies listed on the Nigerian Exchange Group (NGX) for the period of (10) years (2011 to 2020). The data were analyzed using Arellano and Bover Regression Analysis. The findings revealed that effective audit committee has strengthened the influence of board attributes on firm value because an effective audit committee cannot only influence managers' decisions but can have a significant influence on internal control mechanisms to monitor and ensure that decisions made are in line with shareholders wealth maximization. However, effective audit committee does not significantly moderate the relationship between board attributes and firm value of listed consumer goods companies in Nigeria. It was recommended that the need to have an effective audit committee comprised of independent and non-executive directors who are financially literate cannot be overemphasized.

Keywords: Board Attributes, Audit Committee, Firm Value, Consumer Goods Companies

Introduction

Companies' board of directors have been largely criticized for the decline in shareholders' wealth and corporate failure in Nigeria they have been in the spotlight for the fraud cases that had resulted in the failure of major corporations, such as Cadbury in Nigeria. Some of these corporate failures are the lack of vigilant oversight functions by the board of directors, the board relinquishing control to corporate managers who pursue their own self-interest (Tijjani & Ishaku, 2015).

Hence, the roles of board of directors and audit committee in ensuring company's success and the efficacy of its going concern efforts to ensure that the organization is complying with relevant laws and statutes evaluate internal control and make recommendations on how to improve on the weaknesses identified cannot be underestimated. Turley and Zaman (2004) assert that audit committee proactive would further enhance good governance and safeguard the resources of shareholders. As a result, company efficiency is increased by enhancing the Board's oversight functions, decreased information asymmetry and facilitates timely release of financial statement. This will signal good information and enhanced market share price, which directly impacts firm value.

According to Metwally (2021), Composition of corporate boards has been under intense scrutiny by regulators since the collapse of Enron in 2002, as such the board is expected to possess balanced skills and experiences to match the overall organizational needs by having a diverse combination of both the executive directors who have an in-depth knowledge of the firm and the non-executive directors who possess breath of knowledge from their wider experience who are able to monitor management decision in the implementation of strategic decisions capable of mitigating both systematic and unsystematic risks that might be detrimental to shareholders wealth maximization (Kurawa & Ishaku, 2014).

As set out in the SEC Code of Corporate Governance (2003 and 2011), the audit committee is responsible for evaluating corporate financial procedures and the company's financial position. Audit committee also monitors internal control procedures to ensure that codes of best practice are not only applied but strictly adhered to (Azam & Wang, 2021). As a result, company efficiency is increased by enhancing the Board's oversight functions, decreased information asymmetry and facilitates timely release of financial statement. This will signal good information and enhanced market share price, which directly impacts firm value.

However, the share price of consumer goods companies is decreasing in naira value from 2011 to date, this is because some companies (Champion breweries Nigeria Plc and Northern Nigerian Flour Plc) are consistently operating at loss while Union Dicon Nigeria plc reported no sales from the year 2009 to 2020 this means the effectiveness of the board of directors in exercising better control and monitoring of management activities to ensure going concern is in doubt. This is detrimental to value creation and hence the need to determine the effectiveness of the board of directors of listed consumer goods companies in Nigeria and its influence on value creation cannot be underestimated because the board is responsible for strategic decisions capable of mitigating both systematic and unsystematic risks which are detrimental to shareholders wealth maximization, as such this study examine the moderating effect of audit committee on the relationship between board attributes and firm value of listed consumer goods companies in Nigeria.

Review of Empirical Studies on Board, audit committee and value

A number of studies written on board attributes, audit committee and firm value include but not limited to the following studies: Chan and Li (2008) examined independence of the board and audit committee using a sample of Fortune 200 companies and defining top executives of other publicly traded firms as expert-independent directors and controlling for firm specifics, board features, and individual director characteristics. Secondary data was used and analyzed using regression analysis, the findings revealed that the presence of expert-independent directors on board and audit committees enhances firm value.

Al-Matari, Al-Swidi, and Fadzil (2012) examined the association between the board of director's characteristics, audit committee characteristics and the executive committee characteristics on the performance of 162 non-financial companies in Oman companies. The findings indicated a positive and significant relationship between board size, board meeting, audit committee independence and executive committee independence, and the Tobin`s Q. however, board independence and legal counsel have a negative and significant effect on Tobin`s Q. Moreover, a positive but not significant relationship is found between CEO tenure, CEO compensation, audit committee size, and Tobin`s Q. Furthermore, board change, the role of the secretary on the board, audit committee meeting, executive committee size and executive committee meeting have a negative and not significant effect on Tobin`s Q.

Siahaan (2015) examines the effect of audit committee, size of the commissioner's board, and proportion of independent commissioner's board on firm value of the entire manufacturing firms listed in IDX for the period 2007-2011. Sampling technique used in the research is judgment sampling, with the sum of the sample 28 firm for 5 years (2007-2011). Linear regression is used as data analysis technique, both t-test and F test. The results revealed that size of commissioner's board effect on the firm value, meanwhile audit committee and the proportion of independent commissioner's board do not have significant effect on the firm value, Leverage does not significantly affect firm value, and however, the firm size has significant effects on the firm value.

Sukmono and Yadiati (2016) examined the influence of board of commissioners and audit committee on the firm value using both primary and secondary data. The data were analyzed with descriptive statistics by employing the average (mean) and inferential statistics using SEM-

PLS. The findings revealed that board of commissioners and audit committee have positive and significant effect on the financial reporting quality, the board of commissioners and audit committee have significant positive effect on the firm value, financial reporting quality has significant positive effect on the firm value, and the financial reporting quality mediates the positive effect of board of commissioners and audit committee on the firm value.

Barka& Legendre (2017) examined the relationship between independent directors, the audit committee (AC), and firm performance, considering the impact of the chief executive officer's powers and block shareholders. The study uses the maximum likelihood estimator, based on agency theory assumptions and cylindered panel data to examine three models of firm performance. The results show that the independence of the board is reflected clearly by increased economic and equity performance of the firm. However, an AC that is fully independent or meets frequently is associated with lower firm performance. Unlike pension funds, institutional shareholders can be considered an effective control mechanism in the context of France.

Samasta and Muharam (2018) examined the effect of corporate governance's mechanism to firm value which is proxied by Tobin's Q. This mechanism is divided into two, internal mechanism which is proxied by board of director and audit committee and external mechanism which is proxied by institutional ownership. The study used 40 industrial sector companies in Indonesia Stock Exchange for the period 2011-2015. The result shows that board of director has positive but insignificant effect to firm value in Indonesia, audit committee has positive and significant effect to firm value in Indonesia and institutional ownership has negative but insignificant effect to firm value in Indonesia.

Zhou, Owusu-Ansah and Maggina (2018) investigated whether the characteristics of boards of directors and audit committees are associated with firm performance of a sample of firms publicly traded on the Athens Stock Exchange during 2008–2012.The findings revealed that those having large-sized boards performed better, but firms having more independent board members performed poorly. The findings further revealed that firms with small-sized boards and those with boards having more independent members are more likely to form audit committees, however, no significant association between audit committee characteristics and firm performance was uncovered.

Ifada, Faisal, Ghozali, &Udin (2019) examined the effect of company attributes on firm values. The sample size consists of fifty-six companies listed on Jakarta Islamic Index. Regression analysis was used to analyze the data, and the findings revealed that ownership concentration and profitability have a positive effect on firm value. However, liquidity has a negative effect on capital structure. However, the study does not find any relationship between profitability and capital structure. In addition, capital structure mediates the relationship between profitability, liquidity, and firm value.

At the same time, Ashrafi, Abbasi, Hosseini and Etemadi (2019) investigated the effects of different types of related parties' transactions on the firm value with the moderating role of the audit committee incorporates listed in Tehran Stock Exchange. The sample size consists of 100 listed firms in the Tehran Stock Exchange for 6 years of 2013-2018. Panel data and multiple regressions analysis was used, the results revealed a negative relationship between RPTs and the firm value. The findings revealed a positive relationship between the audit committee and the firm value. In addition, the findings revealed that different types of RPTs have a different effect on the firm value. However, the results revealed that audit committee does not significantly affect the relationship between RPTs and the firm value.

Djashan and Agustinus (2020) determined the effect of firm size, profitability, audit committee and other factors on firm value of non-financial companies on the Indonesian Stock Exchange from 2015 to 2017. Data was analyzed using multiple linear regressions, the results show that firm size has a negative effect on firm value while company growth, profitability, liquidity, tangible fixed assets, audit committee and board size all have a significant effect on firm value.

Farooque, Buachoom and Sun (2020) investigated the effects of corporate board and audit committee characteristics and ownership structures on market-based financial performance of listed firms in Thailand. The study applies system GMM (generalized method of moments) as the baseline estimator approach and ordinary least squares and fixed effects for robustness checks on a sample of 452 firms listed on the Thai Stock Exchange for the period 2000-2016. The findings revealed no significant influence between ownership structures, particularly ownership concentration, family ownership and market-based firm performance, while managerial ownership exerts a positive effect on performance. Moreover, as expected, board structure variables such as board independence; size; meeting and dual role; and audit committee meeting show significant explanatory power on market-based firm performance in Thai firms.

Katmon (2021) empirically examines the relationship between corporate governance mechanism and their interactions on the bank value of listed banks in Indonesia and Malaysia, the study measure firm's value using Tobin's q, while corporate governance mechanisms comprised of independent directors, the presence of audit committee, the institutional ownership as well as the percentage of female directors on the board using 48 observations during the year 2016-2018, the result revealed a significant positive association between audit committee independence and firm value. However, the findings revealed a negative relationship between board independent and the presence of female directors on the firm value. In respect to the interaction effects, the study found a complementary relationship between (i) audit committee Independence and board independence and (ii) female directors and audit committee and firm value. Moreover, the regression results also reported a significant substitutive relationship between (i) female directors and institutional ownership (ii) female directors and board independence as well as (iii) audit committee independent and institutional ownership and firm value.

Gadi, Bamanga, Elvis and Abolugbe (2021) assessed the moderating effect of audit quality on the relationship between board dynamics and firm value in listed oil and gas firms in Nigeria from 2010 to 2019. The study adopts descriptive research design with ordinary least square technique for the analysis. It was found that moderated board magnitude has negative and significant effect on firm value which signal reduction in the wealth of the shareholders while moderated board diversity has positive and significant effect on firm value however, moderated board proficiency has no significant effect on firm value.

None of the studies reviewed examined the moderating effect of effective audit committee on the relationship between board attributes (board size, board independence, board meetings and board financial expertise) and firm value hence an addition to the existing literature.

Theoretical Framework

In assessing the effect of board attributes, audit committee and firm value two theories (Agency and Stewardship) have been found to be commonly used in the literature to give the theoretical basis for understanding the dynamics of board attributes and how audit committee influence the relationship between board attributes and firm value.

The understanding and explanation of separation of ownership from control of the firm clearly explained agency theory. Traditional assumption of the, this theory emanates from the relationship between the principal (owners) and the agent (managers). Audit committees primarily align the interests of owners with the management's interest. The establishment of audit committees is regarded as a reaction to information asymmetries between the owners of a company and its management (Herzig &Watrin, 1995). Demsetz and Lehn (1985) asserted that the primary objective of an audit committee is to resolve agency problems by monitoring management's behaviour and inspecting the quality of financial reporting. This theory states that a company consists of a set of linked contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling these resources. The principal-agent relationship as depicted in agency theory is important to understanding how the role of audit committee can assist in minimizing agency conflict which invariably influences firm value (Jensen and Meckling, 1976).

Similar to agency theory, stewardship theory also focused on the alignment of interest between the principal and the agent. However, this theory is more on stewardship because the agent is seen as a steward who is motivated to act in the interest of the firm rather than being an opportunist actor serving his/her personal interest. Yasin (2021) noted that the behavioral assumptions of stewardship theory tend to complement agency theory rather than as a competing or challenging theory in shaping the understanding of effective board governance. However, Hernandez (2012) sees stewardship as the extent to which an individual who serve as a steward willfully subdues his personal interest to act as a trustworthy ally of the owner in protecting the asset of company. Thus, stewardship theory can be referred to as the principal-steward model or the principal-steward relationship. Under this theory the steward is motivated to behave in situations whereby his utility is maximized if and when the utility of the principal is maximized which helps in reducing conflict of interest between the principal and steward.

Therefore, agency theory was adopted to guide this study because the theory postulate that the engagement of managers in the daily operational activities of a firm allow them to possess superior knowledge and expertise than the owners, hence, being in a position to pursue self-interest actions at the expense of shareholders. However, the company's real success is centered on addressing the nature of interactions and relationships between the organizational actors in the process of decision making and control over firm resources which will have a significant influence on value creation.

Methodology

This study adopts an ex-post facto research design because the study used secondary data extracted from the annual report and account of the selected fifteen consumer goods companies in Nigeria. In order to address the problem of endogeneity, the proposed Arellano and Bover generalized method of moments (GMM henceforth) was used to determine the moderating effect of audit committee on the relationship between board attributes and firm value of listed consumer goods companies in Nigeria because the number of cross sections (15 companies) is more than the period of the study (10 years).

Model Specification

$TobinsQ_{it} = \alpha + \beta 1BS_{it}*ACI_{it} + \beta 2BI_{it}*ACI_{it} + \beta 3BFE_{it}*ACI_{it} + \beta 4BMT*ACI_{it} + \beta 5FS_{it} + \beta 6\ FS_{it} + \beta 7LEV_{it}\mathcal{E}_{it}$……$_{i}$

Table 1: Variables and their Measurement

Variable	Type	Measurement	Source
Firm value (TobinsQ)	Dependent variable	Market value of equity divided by book value of equity.	Al-Matari, Al-Swidi, and Fadzil (2012); Freihat, A.F., Farhan, A., &Shanikat, M. (2019); Gadi, Bamanga, Elvis and Abolugbe (2021)
Board Size (BS)	Independent Variable	The total Number of directors sitting on the board	Al-Matari, Al-Swidi, and Fadzil (2012); Hamidu and Salihu (2015); Freihat, A.F., Farhan, A., & Shanikat, M. (2019); Li, Zhou, Zhou and Chen (2021); Yassin (2021)
Board Independence (BI)	Independent Variable	The ratio of NED to total directors sitting on the board.	Al-Matari, Al-Swidi, and Fadzil (2012); Freihat, A.F., Farhan, A., & Shanikat, M. (2019); Li, Zhou, Zhou and Chen (2021); Yassin (2021)
Board Financial Expertise (BFE)	Independent Variable	The ratio of board members with accounting background to total directors sitting on the board.	Li, Zhou, Zhou and Chen (2021)
Board Meeting	Independent Variable	The number of meetings held per year	Freihat, A.F., Farhan, A., & Shanikat, M. (2019)

Audit committee Index	Moderator	Ratio of actual number of audit committee characteristics to the total items on the AC index	Kurawa & Ishaku (2020)
Firm Size (FSIZE)	Control Variable	Logarithm of Total Asset.	Al-Matari, Al-Swidi, and Fadzil (2012); Freihat, A.F., Farhan, A., & Shanikat, M. (2019); Yassin (2021); Azam and Wang (2021) Li, Zhou, Zhou and Chen (2021)
Leverage (Lev)	Control Variable	Total liabilities of Total Asset.	Al-Matari, Al-Swidi, and Fadzil (2012); Freihat, A.F., Farhan, A., & Shanikat, M. (2019); Yassin (2021); Azam and Wang (2021) Li, Zhou, Zhou and Chen (2021)
Firm Age (Fage)	Control Variable	Number of years from the date of listing on the NSE.	Freihat, A.F., Farhan, A., & Shanikat, M. (2019)

Source: Literature Review, 2021.

Results and Discussion

Descriptive Statistics

Table 2 provides summary of statistics for the variables of the study. The summary statistics include measures of central tendency, such as mean, measures of dispersion (the spread of the distribution) such as the standard deviation, minimum and maximum of both the dependent (firm value), explanatory variables (board size, board independence, board financial expertise and board meetings) and the moderating variable audit committee. The table shows the summary statistics of the dependent and independent variables in order to effectively appreciate the nature of the results. The descriptive statistics provides a basic insight into the nature of the data upon which analysis is done.

Table 2 Descriptive statistics of the variables

Variables	Obs.	Mean	Std. Dev.	Min	Max
tobinsQ	150	206.8904	578.1588	0.9206	3111.981
bs	150	10.77333	2.9699	4	17
bi	150	0.7256	0.1011	0.5	0.9
bfinancialexpt	150	3.9	1.1218	2	8
bmeetings	150	4.6067	1.1227	2	9
aci	150	0.9274	0.1372	0.67	1
fs	150	10.5018	0.8032	8.3513	12.0872
leverage	150	0.4401	0.2235	0.0138	2.0125
age	150	54.34	14.7847	26	97

Source: Generated from Annual Report Data of the companies using STATA

Table 2 shows the mean of 206.8904 for tobinsQ meaning that the average firm value of listed consumer goods companies in Nigeria is approximately 206.8904 with minimum 0.9206 and 3111.981, the standard deviation of 578.1588 shows that the tobins Q of the companies under study deviate significantly. The mean of the board size is 10.77333 meaning that on average the board of listed consumer goods companies comprises 11 members with minimum and maximum of 4 and 17 members respectively However, the standard deviation of 2.9699 shows no significant variation in the number of directors sitting on the board of listed consumer goods companies within the period under review. Board independence has a mean of 0.7256 meaning that 73% of the board members consist of non-executive directors which are good representation with minimum and maximum of 0.5 and 0.9 respectively, the standard deviation of 0.1011 signifies no variation in the board composition of the companies for the period under study. Board financial expertise shows a mean of 3.9 meaning on average the board of listed consumer goods companies has 4 members with accounting related qualifications with a minimum and maximum of 2 and 8 respectively, however, the standard deviation of 1.1218 shows no variation in the number of members with accounting related qualifications of the companies under study.

Audit committee index has a mean of 0.9274 meaning that 73% of the board members consist of non-executive directors which are good representation with minimum and maximum of 0.67 and 1 respectively, the standard deviation of 0.1372 signifies no variation in the audit committee attributes of the companies for the period under study.

Board meetings has a mean of 4.6067 meaning that on average the board of listed consumer goods companies held 5 meetings. This is in line with SEC code of corporate governance which stipulates that board of listed companies should meets at least once in every quarter. The minimum and maximum of 2 and 9 meetings respectively and the standard deviation of 1.1227 signifies no variation in the number of meetings held by the companies for the period under study.

Firm size, measured by the logarithm of total assets has a mean of 10.5018, minimum and maximum of 8.3513 and 12.0872 but the standard deviation of 0.8032 suggests no considerable level of dispersion in size of the companies during the period under review. While leverage measured as the ratio of total liabilities to total assets shows a mean 0.4401 with the minimum and maximum of 0.0138 and 2.0125 respectively. However, the standard deviation of 0.2235 shows no much variation in the use of debt by the sampled companies under study. Similarly, company age measured as total number of years from the date of listing has a mean value of 54.34 a minimum and maximum of 26 and 97 with a standard deviation of 14.7847. This implies that age among the companies during the period significantly varies.

Table 3 Correlation Matrix

	tobinsQ	bs	bi	bfinanexpt	bmeetings	aci	fs	leverage	age	vif
tobinsQ	1.0000									
bs	-0.1549	1.0000								2.23
bi	-0.0036	-0.1691	1.0000							1.25
bfinanexpt	-0.1004	0.5310	0.1195	1.0000						1.84
bmeetings	-0.0988	0.0757	-0.1370	-0.1327	1.0000					1.11
aci	0.1579	0.4867	-0.3139	0.1540	0.1010	1.0000				1.79
fs	0.2649	0.6773	-0.2748	0.4387	0.1821	0.6143	1.0000			2.82
leverage	0.0890	-0.0082	-0.0006	-0.1805	0.0302	-0.0497	0.0382	1.0000		1.09
age	-0.0612	0.0764	-0.2803	-0.0841	0.0465	0.2307	0.2647	-0.0190	1.0000	1.19

Source: Regression results computed by the authors using STATA (2021)

Table 3 shows the correlation coefficients on the relationship between the dependent variable firm value, independent variables (board size, board independence, board financial expertise and board meetings) and moderating variable (effective audit committee). The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative), the absolute values of the correlation coefficient indicate the strength, with larger values indicating stronger relationships. The correlation coefficients on the main diagonal are 1.0, because each variable has a perfect positive linear relationship with itself.

The correlation results presented in table 3 also indicate that all the explanatory variables board size, board independence, board financial expertise and board meetings are negatively correlated with the firm value (TobinsQ) while the moderating variable audit committee is positively correlated with the firm value (TobinsQ).

Two of the control variables firm size and leverage are positively correlated with the firm value (TobinsQ). However, firm age was negatively correlated with firm value (TobinsQ). Multicollinearity an instance where more than two of the independent variables or predictors are correlated implies interdependence among the predictors or independent variables and if high in magnitude, adversely affects the predictive ability of the independent variables. The mean VIF result shows 1.66 this proved absent of multicolinearity. Sargan test of the validity of instrumental variables also revealed no over identifying restriction likewise the arellano bond test for zero autocorrelation revealed no autocorrelation.

Table 4 Arellano-Bond dynamic panel-data estimation results

tobins	Coefficient	Std. Err.	t	P>|t|
L1.	0.5213	0.0722	7.22	0.000
bs	11340.9	21461.3	-0.53	0.605
bi	-19458.3	223183.3	-0.09	0.932
bfinancialexpt	-3060.71	28590.36	-0.11	0.916
bmeetings	32205.8	55715.89	0.58	0.572
bsaci	11526.7	21429.77	0.54	0.599
biaci	25811.4	216622.3	0.12	0.907
bfinancialaci	2863.47	29257.75	0.10	0.923
bmeetaci	-31394.06	56567.27	-0.55	0.588
fs	2541.16	6782.824	0.37	0.714
leverage	153.063	5865.044	0.03	0.980
age	-162.8794	259.7645	-0.63	0.541
con	-28379.39	84578.81	-0.34	0.742
P-value	0.000			
No. of obs.	135			
Mean VIF	1.66			
No. of Group	15			
Arellano-Bond test for AR(1) in first differences: z = -0.65 Pr> z = 0.517				
Arellano-Bond test for AR(2) in first differences: z = -0.82 Pr> z = 0.414				
Sargan Test	11.3989	1.0000		

Source: Regression results computed by the authors using STATA

The regression result shows the coefficient of the lagged firm value ($TobinsQ_{t-1}$) reveals a positive and statistically significant effect on current TobinsQ suggesting that previous TobinsQ has significant impact in determining the current TobinsQ ($TobinsQ_t$) the moderating effect of effective audit committee in the relationship between board attributes and firm value is positive and significant. After moderation, board size and effective audit committee has a positive but not significant influence on firm value of listed consumer goods companies in Nigeria. This implies the effective audit committee has change the relationship between board size and firm values meaning as the number of directors sitting on the board increase, the firm value increases, this is consistent with the findings of Chan and Li (2008) who examine independence of the board and audit committee using a sample of Fortune 200 companies and found that the presence of expert-independent directors on board and audit committees enhances firm value. It is also consistent with the finding of Siahaan (2015) who examines the effect of audit committee, size of the commissioner's board, and proportion of independent commissioner's board) on firm value of the entire manufacture firm listed in IDX for the period 2007-2011 and found that audit committee and the proportion of independent commissioner's board does not have significant effect on the firm value. Also, in line with Emeka-Nwokeji and Agubata (2019) who examines the extent to which corporate board attributes drive the performance of non-financial firms in Nigeria and found that board size have a positive and significant effect on corporate performance which has a significant influence on firm value.

However, the findings contradict Al-Matari, Al-Swidi, and Fadzil (2012) who examine the association between the board of director's characteristics, audit committee characteristics and the executive committee characteristics and the performance of the Oman companies and found a positive and significant relationship between board size, board meeting, audit committee independence and executive committee independence, and the Tobin`s Q.

Mak and Kusnadi (2005) whose findings revealed an inverse relationship between board size and firm value of firms listed in both Singapore and Malaysia countries. This suggests that the negative relationship between board size and firm value transcends different corporate governance systems. Nguyen and Faff (2007) examined the relationship between firm market value and the size and gender diversity of a board of directors for a sample of publicly listed Australian firms. The results show that smaller boards appear to be more effective in representing the shareholders as smaller boards are associated with higher firm value. As board size increases firm value declines, however at a decreasing rate suggesting that the relationship between board size and firm value is not strictly linear. Hamidu and Salihu (2015) examine the relationship between corporate attribute of board size and market value of firms in Nigerian chemical and paints industry. Results of the study shows that board size (BS) has insignificant and negative impact on market value of equity implying that increasing the number of directors on the board decreases the market value of equity. This finding is also in line with Salem, Metawe, Youssef, Mohamed (2019) who examines the effect of board of directors' characteristics on the firm's value in an emerging country (Egypt) and a developed country USA and found that board size affected firm value in both the Egyptian and American contexts negatively and significantly.

The combined figure for audit committee and board independence shows a positive value of 25811.4 which is insignificant at 5% significance level. This means that effective audit committee did not significantly moderate the relationship between board independence and firm value. This is contrary to the findings of Al-Matari, Al-Swidi, and Fadzil (2012) who examine the association between the board of director's characteristics, audit committee characteristics and the executive committee characteristics and the performance of the Oman companies and found that board independence and legal counsel are significantly and negatively related to Tobin`s Q. Also contrary to the findings of Sukmono and Yadiati (2016) that examine and analyze the influence of board of commissioners and audit committee on the firm value and found that board of commissioners and audit committee have a positive and significant effect on the firm value of commercial banks listed in Indonesia. Khosa (2017) who used the value-relevance model to examine the effect of board independence on market value of equity, the finding revealed an inverse relationship between board independence and firm value of group-affiliated firms in India illustrates that effective monitoring by outside directors is largely influenced by the institutional setting and ownership structure. Also contrary to Emeka-Nwokeji and Agubata (2019) who examines the extent to which corporate board attributes drive the performance of non-financial firms in Nigeria and found that board independence and board remuneration have a negative and significant effect on corporate performance which is a significant determinant of firm value.

The combined effect of audit committee and board financial expertise has a positive but not significant effect on firm value of listed consumer goods companies in Nigeria. This is because a board that is financially literates will make decisions capable of adding value to shareholders. This finding is consistent with the findings of Almeida (2009) whose results indicate that firm value improved with high types of professionals, accountants seated on the board; directors with high level of education and that participated in executive training influence firm value positively. Khidmat, Khan and Ullah (2020) who found gender diversity, education diversity and foreign national diversity measured through Blau index to have a positive and significant effect on the Chinese A-listed firm performance for both the accounting and market measures. Ali, Wang, Jebran and Ali (2012) explore how multiple facets of board diversity influence on technical efficiency (TE) and total factor productivity (TFP). The study measure board diversity in two dimensions: relation-related dimension (age and gender) and task-related dimension (tenure, education and expertise). The findings illustrate that a higher diversity on corporate board (in terms of age, gender, tenure, education and expertise) positively influence firm efficiency.

The combined effects of effective audit committee and board meetings have a negative but not significant effect on firm value of listed consumer goods companies in Nigeria. This is because a board that frequently meets without full attendance signifies failure to reach consensus and this is detrimental to value because of the associated board meetings expenses which may affect shareholders wealth maximization.

In the model, the interaction terms between effective audit committee and board attributes were examined to test the moderating influence in this study. This model is found to be statistically significant considering the P-value of 0.000. However, the result regarding the interaction terms on integrated model which incorporated the moderating effect of effective audit committee and board attributes individually and jointly, suggest that the moderating influence of effective audit committee on board attributes and firm value (TobinsQ) is not significant at 95% significant levels. This provide evidence for the acceptance of null hypothesis three that audit committee does not significantly moderate the relationship between board attributes and firm value of listed consumer goods companies in Nigeria.

Conclusion and Recommendations

This study examines the moderating effect of effective audit committee on the relationship between board attributes and firm value of listed Nigerian consumer goods companies. Therefore, from the findings of the study, the study concludes that the role of board attributes on value creation cannot be overemphasized.in addition, Effective audit committee has also strengthened the influence of board attributes on firm value because an effective audit committee can not only influence managers' decisions but can have a significant influence on internal control mechanisms to monitor and ensure that decisions made are in line with shareholders wealth maximization. It was recommended that the need to have an effective audit committee comprised of independent and non-executive directors who are financially literate cannot be overemphasized.

References

Abobakr, M. G., & Elgiziry, K. (2017). The relationship between board of directors' characteristics and bank risk-taking: Evidence from the Egyptian banking sector. *Journal of Finance and Accounting, 5*(1), 24-33.

Ali, F., Wang, M., Jebran, K., & Ali, S. T. (2012). Board diversity and firm efficiency: Evidence from China. *Corporate Governance, 21*(4).

Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. (2012). The effect of board of directors' characteristics, audit committee characteristics and executive committee characteristics on firm performance in Oman: An empirical study. *Asian Social Science, 10*(11), 14.

Almeida, E. J. F. D. (2009). An exploration of boards of directors' quality: The development of an index for directors attributes and the relation with firm value and performance. *Corporate Board: Role, Duties & Composition, 7*(1), 23.

Ashrafi, M., Abbasi, E., Hosseini, S. A., & Etemadi, M. P. (2019). The effect of related parties transactions on the firm value: Moderating role of audit committee. *Iranian Journal of Finance, 3*(2).

Azam, M., & Wang, M. (2021). The effects of the audit committee independence and expertise on firms' value: An empirical study on Palestine. *International Journal of Economics and Financial Research, 7*(1), 14-20.

Barka, H. B., & Legendre, F. (2017). Effect of the board of directors and the audit committee on firm performance: A panel data analysis. *Journal of Management & Governance, 21*(1), 737–755.

Ben-Amar, W., Francoeur, C., Hafsi, T., & Labelle, R. (2015). What makes better boards? A closer look at diversity and ownership. *British Journal of Management, 24*(1), 85–101.

Brick, E., & Chidambaran, N. K. (2010). Board monitoring activity and its impact on firm value for a broad panel of firms. https://doi.org/10.1016/j.jcorpfin.2010.06.003

Chan, K. C., & Li, J. (2008). Audit committee and firm value: Evidence on outside top executives as expert-independent directors. *Corporate Governance: An International Review, 16*(1).

Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy, 93*(6), 1155-1177.

Djashan, I. A., & Agustinus, Y. (2020). The effect of firm size, profitability, audit committee, and other factors to firm value. *Account and Finance Review, 5*(1), 22-27.

Farooque, O. A., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance – Emerging trends from Thailand. *Pacific Accounting Review, 32*(1).

Freihat, A. F., Farhan, A., & Shanikat, M. (2019). Do board of directors' characteristics influence firm performance? Evidence from the emerging market. *Journal of Management Information and Decision Sciences, 22*(2), 148-165.

Gadi, U. T., Bamanga, B. M., Elvis, E. O., & Abolugbe, K. E. (2021). Board dynamics and firm value: The role of audit quality in listed oil and gas firms in Nigeria. *International Journal of Social Science and Economic Research, 6*(2), 588.

Hamidu, I., & Salihu, M. (2015). Corporate attribute of board size and market value of firms in the Nigerian chemical and paints industry. *International Journal of Humanities and Social Science, 5*(6).

Herzig, N., & Christoph, W. (1995). Obligorische rotation des wirtschaftsprüfers: Ein Weg zur Verbesserung der externen Unternehmenskontrolle. *Zeitschrift für betriebswirtschaftliche Forschung, 47*(3), 775-804.

Ifada, L. M., Faisal, F., Ghozali, I., & Udin, U. (2019). Company attributes and firm value: Evidence from companies listed on Jakarta Islamic Index. *Research Journal of Finance and Accounting, 10*(11), 11.

Ishaku, A., Musa, F., & Yau, M. (2020). Audit quality and firm value of listed insurance companies in Nigeria. *Global Scientific Journal*, 8(7).

Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, *48*(3), 831-880.

Katmon, N. (2021). The relationship between corporate governance mechanism and the firm value: The case of Islamic banks in Malaysia and Indonesia. *Home Archives*, *12*(3).

Khosa, A. (2017). The effect of board independence on firm value of group-affiliated firms in distinct Indian settings. *International Journal of Accounting & Information Management, 25*(2).

Kumar, R., Sheeba, M., & Kapil, S. (2016). Effect of board characteristics on firm value: Evidence from India. *South Asian Journal of Business Studies, 5*(6).

Kurawa, M. J., & Ishaku, A. (2014). The effect of corporate governance on dividend policy of listed banks in Nigeria: A panel data analysis. *Research Journali's Journal of Finance, 2*(2), 6-9.

Li, Q., Zhou, W., Zhou, H., & Chen, J. (2021). Do board characteristics matter for growth firms? *Journal of Risk Financial Management, 14*, 380.

Mak, Y. T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, *13*(3), 301-318.

Metwally, M. T. M. (2021). Board nationality diversity: Its measurement, determinants, and impacts on firm value and accounting conservatism (PhD thesis, University of Nottingham).

Mishra, R. K., & Kapil, S. (2018). Effect of board characteristics on firm value: Evidence from India. *South Asian Journal of Business Studies*.

Nguyen, H., & Faff, R. (2007). Impact of board size and board diversity on firm value: Australian evidence. *Corporate Ownership and Control, 4*(2).

Salem, W. F., Metawe, S. A., Youssef, A. A., & Mohamed, M. B. (2019). Boards of directors' characteristics and firm value: A comparative study between Egypt and USA. *Arab Academy for Science, Technology and Maritime Transport*, *6*(4).

Samasta, A. S., & Muharam, H. (2018). The effect of board of director, audit committee, institutional ownership to firm value, with firm size, financial leverage, and industrial sector as control variables (study on listed companies in Indonesian stock exchange period 2011-2015). *Journal of Business Strategy, 27*(1).

Sukmono, S., & Yadiati, W. (2016). Effect of board of commissioners and audit committee on the firm value with mediating effect financial reporting quality. *Research Journal of Finance and Accounting, 7*(2), 131.

Tijjani, B., & Ishaku, A. (2015). Board characteristics and dividend policy of listed deposit money banks. *BUK Conference.*

Turley, S., & Zaman, M. (2004). Corporate governance effects of audit committees. *Journal of Management & Governance, 8*(1).

Yassin, M. Z. (2021). Investigating the effects of board and firm characteristics on firm performance: An agency theory perspective. *Scientific Journal for Financial and Commercial Studies and Researches (SJFCSR)*, *2*(1), 228-264.

Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. *Journal of International Accounting, Auditing and Taxation*, *31*(1), 20-36.