

# Corporate Governance Characteristics and Firm Performance of Manufacturing Firms in Nigeria: A Panel Data Approach

Egu Usang Inah<sup>1</sup>, Egim Augustine Magam<sup>1</sup>, Bassey Bassey Ubi<sup>2</sup>, Ukpe Essien Amos<sup>3</sup>, Ubi Johnson Johnson<sup>4</sup> & Nkamare Stephen Ekpo<sup>5</sup>

<sup>1</sup> Department of Accounting, University of Calabar, Calabar, Nigeria

<sup>2</sup> Department of Accounting, University of Abuja, Nigeria

<sup>3</sup> Department of Accounting, Akwa Ibom State University, Nigeria

<sup>4</sup> Department of Accountancy, Federal Polytechnic, Ukana, Nigeria

<sup>5</sup> Department of Banking and Finance, University of Calabar, Calabar, Nigeria

Correspondence: Nkamare Stephen Ekpo, Department of Banking and Finance, University of Calabar, Calabar, Nigeria.

doi:10.56397/FMS.2024.08.07

## Abstract

The study empirically examined corporate governance characteristics and firm performance of manufacturing firms in Nigeria. The Specific objectives were: to ascertain the effect of Board size on performance of manufacturing firms in Nigeria, to investigate the effect of board composition on the performance of manufacturing firms in Nigeria, to examine the effect of audit committee size on the performance of manufacturing firms, to determine the effect of Directors ownership on the performance of manufacturing firms in Nigeria. The study employed ex-post facto design and secondary data was obtained from annual reports of manufacturing sector and Nigeria Exchange Group Fact Book for 2011 to 2021. In the analysis, panel data was adopted. The major findings of the study include Board size does not have significant effect on performance of the manufacturing firms in Nigeria; Board composition had a significant effect on performance of the manufacturing firms in Nigeria; Audit committee size had a significant effect on performance of the manufacturing firms in Nigeria; Board ownership does not have a significant effect on performance of the manufacturing firms in Nigeria. Based on the findings, the following recommendations were made: Management should increase their board composition and also employ foreign directors on their board so as to enhance their firms' quality. Board size of firms in Nigeria should not be too large and must be made up of qualified professional who are conversant with oversight function. There should also be a combination of self-government regulation so as to detect rule violations and also monitor systemic problems for early solutions. Audit committee is considered one of the functional subcommittees on the board of organizations with the mandate of supervising and enforcing compliance with accounting and reporting policies. Therefore, reliable financial information should be based upon which investors and potential investors make informed economic decisions.

**Keywords:** corporate governance characteristics, board size, board composition, audit committee size, directors ownership, performance

## 1. Introduction

Corporate governance embodies structures, systems, mechanisms and framework through which organizations are directed and controlled by those saddled with duties and responsibilities in the interest of shareholders and other stakeholders (Geraldine, 2017). Corporate governance relates to the legal way and manner in which financial resources available to an organization are judiciously used to achieve the overall corporate objective of

an organization (Bilkisu, 2014). Corporate governance ensures that responsibilities are clearly defined amongst all stakeholders in order to facilitate policy implementation. By doing this, it provides guidelines through which organizational objectives are set, as well as the modalities for achievement and monitoring performance. The widespread rise in deliberate accounting deceits and fraud in both financial and non-financial sectors which have caused corporate failures has taken global stage. Many companies failed to provide quality and reliability accounting information to their shareholders. Some firms broke the most basic rule of accounting, the worse being rebooking income that was earned and had earlier been taken to profit.

Ogbeide and Igbinosa (2015) specifically observed that, in developing economies especially in Nigeria, failure to implement standard internal governance procedures has been the bane of the financial disposition of numerous corporations today. Most of the business failures in the recent past in the Nigeria banking industry were attributed to failure in internal governance practices (Sanusi, 2015). Therefore, there is need to continue to strengthen the internal governance structure of firms in order to enhance their viability, survival and performance. Good governance is recognized to influence the quality of financial reporting which in turn has an important impact on investors' confidence and organizational performance. Thus, the essence of good governance is to bring companies to respect the rule of law, play by the rules guiding businesses and hold ethics and professionalism in the highest esteem when dealing with accounting information, social responsibility and shareholders.

An effective internal governance structure should promote sound internal control system, risk management, compliance with ethical and statutory requirements, ensures transparent and efficient markets, accountability and trust in the management of organizations. Therefore, managing these conflicting interests in a way that produces mutually satisfying outcomes for all stakeholders is at the core of the good corporate governance. Expectedly, this problem has generated renewed interest in understanding the dimensions and ramifications of corporate governance, and its centrality to the wellbeing, management and control of organizational resources for the survival of firms across sectors. Emphasis is not just on how well the organization succeeds in its profitability goal, but how well it is managed, run and internally regulated, both formally and informally. The foregoing problems have necessitated this study on internal corporate governance characteristics and performance of manufacturing firms in Nigeria. The specific objectives were: to ascertain the effect of Board size on performance of manufacturing firms in Nigeria, to investigate the effect of board composition on the performance of manufacturing firms in Nigeria, to examine the effect of audit committee size on the performance of manufacturing firms, to determine the effect of Directors ownership on the performance of manufacturing firms in Nigeria.

## **2. Literature Review**

### *2.1 Theoretical Framework*

#### *2.1.1 Agency Theory*

This theory was propounded by Casterella, et al. (2007). The theory states that a useful economic theory of accountability helps to explain the development of the audit. Agency theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by the agents. It is built on the premises that there is an agency relationship wherein the principal delegates work to the agent. As a result, there evolves risk sharing and conflict of interest between the two parties. It is the belief that the agent will be driven by self-interest rather than the desire to maximize the profits for the principal. The theory describes the conflicts that arise as a result of the separation of ownership and control. The principal agent relationship is a contract relationship where the principal establishes appropriate incentives for the agent. However, since principal and agent have different incentives and because of information asymmetry and external disturbances, the principal is not able to adequately monitor the agent's actions. Therefore, the economic principal-agent theory is about the principal designing remuneration plans for the agent to protect himself against opportunistic behavior.

Rezaee (2019) described "corporate governance as the way a company is managed, monitored and held accountable". There has been a great deal of critique relating to this 'conventional' view of corporate governance. Firstly, this perspective overlooked the diversity of the stakeholders within the principal-agent relationship and thus ignored the game around an enterprise, which was performed by multiple stakeholders with varying degrees of conflicting interests among themselves. Secondly, this perspective focused too narrowly on the bilateral contract between owners and 27 managers and ignored the interdependencies and interactions among stakeholders. It was also criticized for treating managers as opportunistic agents that were driven by individual utility maximization. Allen (2015) suggested that corporate governance concerns arrangements to ensure that firms are operated in a way that society's resources are used efficiently, and that competition and reputation should also be included as mechanisms to deal with, in addition to the conventional ones. Rashid (2018) advocated that corporate governance consists of institutions that induce or force management to

internalize the welfare of stakeholders. The stakeholder and shareholder theories are relevant to this study in the sense that the theories are relevant to the functioning of Board characteristics, Top management characteristics and stakeholder communication characteristics. As noted by Michael (2020) in their study, the common aim of stakeholder and shareholder theories was to posit a link between various characteristics of the Board and Firm performance. A review of shareholder and stakeholder theories demonstrated how these two theories positively had impact on performance of a firm and formed the basis for this study; hence it created better look for company performance from corporate governance perspective.

Stakeholder and shareholder theories described, and explained, specific corporate characteristics and behaviors (Miles, 2022). The firm and its managers have special obligations to ensure that the shareholders receive a fair return on their investment; but the firm also has special obligations to other stakeholders, which go above and beyond those required by law. In cases where these interests conflict, the demands and interests of some stakeholders, including shareholders, must be moderated or sacrificed in order to fulfill basic obligations to other stakeholders.

## 2.2 Corporate Governance

Corporate governance describes how companies are managed and controlled. Babatunde (2019) Opined that corporate governance apparatus is twofold, internal and external. Internal Corporate governance embodies giving precedence to owner's concerns and ensuring that the board checks on top management serving as a link between management and the owners. Corporate governance examines and controls executive actions by means of external policies concerning other stakeholders. Corporate governance deals with shareholders' wealth maximization and efficient utilization of firms' assets. Corporate governance characteristics are statutory requirements that protects outside shareholders from expropriation by administrators, insiders or managing shareholders. Where such mechanisms are in non-existence, difficulties of monitoring are suffered by outside investors while administrators or managers may misuse organizational assets at the expense of small shareholders, and this will impact on the long run performance of firms (Ammar, 2013).

Corporate governance is basically concerned with building trust, ensuring accountability and transparency as well as maintaining an effective channel of information disclosure which helps to bridge the gap between information available to directors and the information available to stakeholders thereby helping to resolve the agency problem and foster good performance of firms (Rogers, 2018). Corporate governance is also seen as a mechanism by which managers provide guidance and direction, creates adequate environment that encourages team ship effort amongst work groups. Managers are therefore expected to be competent, proficient and skillful in conceptual thinking, goal setting and objectives and developing strategies of arriving at suitable decisions (Bello 2022). From the view of Oyejide and Soyibo (2021), corporate governance is examined from two points of view: the narrow and the broad perspectives. The narrow perspective looks at the structure within which organizations are directed and the broad perspective is professed as being the hull mark of both a market and democratic society.

From the above, it is crystal clear that corporate governance is the bedrock for the survival and enhanced corporate performance of firms. This scenario led to regulatory agencies evolving codes of best practice to enhance adequate corporate governance culture in firms. The concept corporate governance refers to the process that seeks to direct and control the affairs of an organization, so as to protect the interest of all stakeholders in a balanced manner-with application of the principles of openness, integrity and accountability. In a research conducted by Gabrielsen (2012) they viewed corporate governance as all encompassing-it concerns the manner in which corporate entities are managed and regulated, and involves accountability, trust, honesty and stewardship on the one hand and supervision, control, monitoring, oversight and ensuring quality financial reporting. In this research paper we will consider some of the definitions in the literature.

Corporate governance constitutes a major factor in determining the success or failure of any organization and its ability to respond positively in times of economic distress. Therefore, the proper functioning of any organization depends on the underlying soundness of its individual component of systems, structures and processes and the relationships between them. Corporate governance being a multi-disciplinary subject embraces economics, accounting, finance among others and as such must be defined and viewed in the context that suit the purpose of the user. Corporate governance constitutes a major factor in determining the success or failure of any organization and its ability to respond positively in times of economic distress. Corporate governance is a field in economics that investigates how to secure/motivate efficient management of corporations by the use of incentive mechanisms, such as contracts, organizational designs and legislation. This is often limited to the question of improving financial performance, for example, how the corporate owners can secure/motivate that the corporate managers will deliver a competitive rate of return.

Shleifer (2017) have listed the main factors that support the stability of any country's financial system to include: good corporate governance, effective marketing discipline, strong prudential regulation and supervision, accurate

and reliable financial reporting systems, a sound disclosure regime and an appropriate savings deposit protection system. Corporate governance describes the way a company is managed, monitored, and held accountable. It covers various economic phenomena and is often described from the shareholders' view of what a company should and should not do. Some define it from a regulatory perspective as the system of laws, rules, and factors that control operations at a company. Consistent with the above definition, Shleifer (2017) stated that corporate governance deals "with the ways in which suppliers of finance to a corporation assure themselves of getting a return on their investment".

Corporate governance is a field in economics that investigates how to motivate management of corporations by use of incentive mechanisms, such as contract, organizational design, and legislation. Zabihollah (2019) defined corporate governance the process affected by a set of legislative, regulatory, legal, market mechanisms, listing standards, best practices and effort of all corporate governance participants, including the company's directors, officers, auditors, legal counsel and financial advisors, which creates a system of check and balances with the goal of creating and enhancing enduring and sustainable value, while protecting the interest of other stakeholders.

On December 1, 1992, the Cadbury Report on the Financial Aspects of Corporate Governance was published. It defined corporate government as "the system by which companies are directed and controlled". The use in the Cadbury definition of the word "system" is striking in that it emphasizes that much of the activity of governance is about "structure" (made up of boards, members of and types of non-executive director, board committees and the likes) and "process" (provision of information, internal controls, financial reporting, terms of services agreements), as distinct "value" or other behavioral matters or the societal or economic obligations of companies. The International Chamber of Commerce provides a corporate-specific definition of corporate governance: corporate governance is the relationship between corporate managers, directors and the providers of equity, people and institutions who save and invest their capital to earn a return. It ensures that the board of directors is accountable for the pursuit of corporate objectives, and the corporation itself conforms to the law and regulation.

In the view of Yakubu (2015), code of good governance are sets of best practices and recommendations issued to address deficiencies in a country's governance systems by recommending set of norms aimed at improving transparency and accountability among top managers and directors. However, most good governance codes have no specific legal basis and are not legally bonding (Hamid, 2009). There are basic principles (ingredients) that characterize good corporate governance. According to Singhal (2021), principle of good corporate governance should include: Protection of shareholders right, Interest of shareholders, Fulfillment of responsibilities by board, Integrity and ethical behavior, Disclosure and transparency.

The Central Bank of Nigeria Code of Corporate Governance for Banks states: "specifically for financial sector, poor corporate governance was identified as one of the major factors in virtually all known instances of financial institution distress in the country". Kumolu (2017) points out that the thrust of corporate governance lies in putting in place structures that would ensure that management is accountable to the stakeholders. According to Singhal (2021), there are no globally accepted set of corporate governance principles that can be applied across a broad range of business practices and economic environments.

### *2.3 Board Size*

The number of directors making-up the board of a company can influence its performance positively or negatively. Mbu-Ogar (2017) posited that a company's board size borders on the number of directors on the board of a corporate organization. He argued that a value-relevant of a corporate board is its size. The problem, however, remains that it is difficult to determine the optimal size of a board since a lot of factors are taken into consideration in choosing directors. The determination of an ideal board size for an organization is very important because the number and quality of directors in a firm determines and influences the board functioning and hence firm performance.

One of the disadvantages associated with large board is communication coordination problem which makes large board has less efficient monitor than small board. The director's free-rider problem is also more intense in large board than small board. Proponents of large board size believe it provides an increased pool of expertise because larger boards are likely to have more knowledge and skills at their disposal. They are also capable of reducing the dominance of an overbearing CEO and hence put the necessary checks and balances. It is the duty of Board of Directors to ensure that the organization is taking full advantage of the opportunities at its disposal and that market value of the firm is increasing. A board can be effective if its decision power and influences on the managers is very strong. The effectiveness of the board of directors and effect on performance of the firm has been studied widely. Board's monitoring and supervising capacity is increased as more and more directors join the board. Bello (2015) further asserted that larger boards could be less effective than small boards. Increase in board's size occurs with increase in agency problem (such as director free-riding) within the board and the board

becomes less effective.

The agency problem also increases with board size as there are more conflicting groups representing their own diverse interest. In addition, free-riding also increases as some directors neglect their monitoring and controlling duties to other colleagues on the board. Most companies also have a representative of minority shareholders of board that is not usually increased with increasing board size. Bello (2015) also suggest that a board size between 6 to 15 members is dealt to enhance the firm performance. Bello (2015) documented that firm having small board sizes have higher stock market value and increased firm performance. Allen (2015) opine that a small board size escapes the difficulty of organizing and coordinating large group of directors and ensures effectiveness and performance of the firm. These arguments are however inconsistent with the resource dependency theory which professes that larger board size seems to be better since a large number of overall connections with organizations and directors outside the firm provide more sources of information for the director and a level of environmental awareness not readily available to management.

The Board must meet on regular basis, retain full control over the company and monitor the executive management. A clearly accepted division of responsibilities is necessary at the head of the company so no one person has complete power, answerable to no-one (Ammar, 2013).

Bello (2015) argued that firm's performance increases if the board size increased but the contribution of an additional board member decreases as the size of the board increases. Studies that find a negative relationship between board size and firm performance include Miles (2022) which examine the relationship board size and firm performance. Corporate Governance indices bestow higher rating to firms with independent boards.

Miles (2022) state that non-executive directors are effective monitors firm's strategy related issues. They are able to provide independent expert judgment when dealing with the executive directors in areas such as pay awards, executive director appointments and dismissals. Sanusi (2015) recorded that, non-executive directors in the board become less effective if they continue with the same board for many years. Dogan (2014) investigated the impact of board size on financial performance in Turkey. The result showed that a significant positive relationship exists between board size and financial performance. This means that increase in board size would significantly lead to increase in financial performance.

#### *2.4 Board Composition*

According to Klapper and Love (2014), board composition entails the proportion of executive directors to non-executive directors on the board. Executive directors also known as insider directors are saddled with the routine administration and operation of organizations while non-executive directors also known as outsider directors participate indirectly in the management of organizations. Non-executive directors contribute to the strategic success of companies and also challenge the strategy if need be and equally makes their inputs on direction of strategy. They ensure their executive counterparts are accountable for decision taken and also monitor their reporting performance to avoid information asymmetry.

#### *2.5 Audit Committee Size*

Audit committee is considered one of the functional subcommittees on the board of organizations with the mandate of supervising and enforcing compliance with accounting and reporting policies. True and reliable financial information is the base upon which investors and potential investors make informed economic decisions. Therefore, the size of an audit committee influences the quality of financial reports. Bansal and Sharma (2016) however, proposed that financial information misrepresentation and earnings management can be mitigated if organizations audit committee structure is adequate.

#### *2.6 Director's Share*

The directors, with their vast wealth of experience, provide leadership and direct the affairs of the business with high sense of integrity, commitment to the firm, its business plans and long-term shareholder value. Corporate governance rankings of companies are also one of the considerations of investors when evaluating stock prices. Board members are the individuals that shareholders rely on to ensure that their investment is protected and well managed. This makes the board of directors one of the most critical internal corporate governance mechanisms. The composition of corporate boards is of vital importance within corporate governance as it pertains to identifying structures that align the interests of management and stakeholders (Rose, 2017). Directors are effective monitors of firm's strategy related issues. They are able to provide independence expert judgment when dealing with the executive directors in areas such as pay awards, executive director appointment and dismissals.

Furthermore, Bello (2015) showed that the amount of stock owned by individual directors is significantly correlated with various measures of firm performance as well as CEO turnovers in poorly performing firms. The board of director's role is the hub upon which corporate governance is built. The board is charged with the task of effectively discharging its duties regularly. Different scholars however have suggested that board effectiveness

can only be achieved if they exist an appropriate board size, composition and leadership structures. The board should comprise of individuals from diverse backgrounds with the capacity of discerning the strategic aims and objectives of the company, which in turn will lead to increased firm value. Members of the board should possess basic skills and tenets which will enhance their performance on the board. These skills include but are not limited to sense of accountability and integrity, entrepreneurial bias, knowledge on board matters, relevant core competence, upright character and pro-active intuition.

The combination of executive and non-executive directors constituting a firm's board is very vital for its performance. The proportion of the non-directors would to a large extent determine the quality of decisions taken since objectivity would play a crucial role and whether the board can actually monitor and control the management. A board is seen to be more independent if it has more non-executive directors.

Executive directors are more familiar with the activities of the organization and therefore in a better position to monitor top management particularly if they perceived the opportunity to be promoted to positions occupied by incompetent executives. Similarly, non-executive directors may act as "professional referees" to ensure that competition among executive directors stimulates actions consistent with shareholders' value maximisation. Indeed, evidence from empirical studies (Coles & Terry, 2014) strongly agreed to the crucial role of non-executive directors in monitoring management performance, offering invaluable advice to shareholders and protecting the interest of shareholders. According to Michael (2020), financial markets usually respond positively to the announcement of the appointment of non-executive directors by showing an appreciable level of improvement in the performance of the company's shares. Though, other studies (Bansal & Sharma, 2016) could not establish any significant relationship between non-executive directors and firm performance, it is generally accepted that the effective performance of the board depends on having the right proportion of executive and non-executive directors on the board.

### *2.7 Corporate Governance and Firm Performance*

Previous empirical studies have provided the nexus between corporate governance and firm performance (Klapper & Love, 2014) with inconclusive results. Others have shown that well governed firms have higher firm performance. The main characteristic of corporate governance identified in some studies include board size, board composition, and whether the CEO is also the board chairman. There is a view that larger boards are better for corporate performance because they have a range of expertise to help make better decisions and are harder for a powerful CEO to dominate. However, recent thinking has leaned towards smaller boards. Yakubu (2015) argues that large boards are less effective and are easier for a CEO to control. When a board gets too big, it becomes difficult to co-ordinate and process problems. Smaller boards also reduce the possibility of free riding by individual directors and increase their decision taking processes. Empirical research supports this.

Bello (2022) also find negative correlation between board size and profitability when using sample of small and midsize Finish firms. In a Nigerian study, Sanda (2013) found that, firm performance is positively related with small, as opposed to large boards. Though the issue of whether directors should be employees of or affiliated with the firm (inside directors) or outsiders has been well researched, yet no clear conclusion is reached. On the one hand, inside directors are more familiar with the firm's activities and they can act as monitors to top management if they perceive the opportunity to advance into positions held by incompetent executives. On the other hand, outside directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization.

Klapper and Love (2014) examine corporate governance and performance in a sample of firms in 14 countries, most of which are developing economies. They find that better corporate governance is associated with better performance in the form of Tobin's q and ROA and that good governance seems to matter more when the legal environment of a country provides investors with weaker protections. Corporate governance generally refers to the set of mechanisms that influence decisions made by managers when there is a separation of ownership and control. As discussed above, some of the conventional variables used as measures of corporate governance are Board size, Board composition and CEO duality. Governance and performance should be mutually reinforcing in bringing about the best corporate governance. Transparency and disclosure of information are key attributes of good corporate governance which banks must cultivate with new zeal so as to provide stakeholders with the necessary information to judge whether interest is being taken care of.

### *2.8 Firm Size*

Generally, the firm's size, profitability, and survival differ from firm to firm in the market economy. The question is what are the factors determining that observed variations, and how do they operate? and it has been active research topic of industrial economics theory. The firm size means that the ability of a firm possesses and the variety and number of production capability or the quantity and multiplicity of services a firm can be offered concomitantly to its customers. In current world's trend, due to the phenomenon of economies of scale, size of a

firm plays vital role in competing with competitors through the cost reduction and, take and hold more opportunities. Further based on this concept the firm's size is a factor in determining the firm's profitability and reveals a positive association between size and firm's profitability.

Doğan (2014) also supportively said to this concept as big firms have the opportunity to have more profit since they have a bigger market share. So based on these situations, the big size firms work in more profitable with little competition is expected. The firm's performance has vital role in running businesses and, measuring performance helps to identify firms' position in a given time. Firm can optimize its capability through understanding the determinant factors of its performance. In this way finding the relationship between Firm's size and profitability is valuable to the industry. At the same time the existing empirical studies provide the mixed results evidence for the relationship between firm's size and firm's profitability. Some of the authors found that firm's size has a positive relationship with firm's profitability whereas in contrast, some other researchers have found a negative influence of firm's size on firm's profitability (Bello, 2015), more than above, some other researchers have found an insignificant influence of firm's size on firm's profitability.

The effect of firm's size on firm's profitability has been examined by several studies since the famous study of "effect of size and growth" conducted by Rose (2017). Size has been found to be a vital factor in determining firm's profitability through the capital structure decision. After that, size was included as one of the firm's specific factors by many scholars in their studies. In the Literature most of the scholars found that a positive relationship between firm's size and firm's profitability (Doğan, 2014). As well as theoretically also firm's size explores positive relationship with firm's profitability according to the economies of scale. Bankruptcy costs decrease when firm's size increases. Firm's size should be positively related to borrowing capacity, because potential bankruptcy costs make up as smaller part of value for larger firms than smaller firms. In addition to that, larger firms enjoying economies of scale in transactions costs allied with long-term debt that is not available to smaller firms.

Allen (2015) explored that the large firms, measured in term of total sales, are more profitable compared to small firms. Due to the economies of scale the large firms enjoying more profit and take advantages on negotiating the price of inputs and quantity of output. Another study by Sanda (2013) also states that advantage of economies of scale by supporting its finding of the larger total assets provides the higher profitability. Some other recent studies also provide positive relationship evidence such as Alsawalhah (2012) studied 39 listed Jordanian industrial companies' data to examine the effect of capital structure on profitability with size as a control variable during a six-year period (2004-2009) in Jordan. That study results also revealed that profitability increases along with the control variables of size and sales growth.

Karaduman (2012) studied the effect of firm size on profitability on the firms operating in manufacturing sector, listed in Islamabad stock exchange (ISE), Pakistan for the period from 2005 to 2011. Results of this study revealed that firm size has a positive effect on profitability. Like that, Doğan (2014) also examined the relation between firm's size and firm's profitability in Turkey between the years 2008-2011 and summarized that there was a positive relation between size indicators (total assets, total sales and number of employees) and profitability of the firms in all three models. In other words, it can be said that the firms listed in Turkey have higher profitability as their size expands. Bilkisu (2014) study intended to assess the relationship of firm size and age with financial performance in Listed Companies on Tehran Stock Exchange, Iran and the conclusion was drawn as there is a significant positive relationship between firm size and its financial performance. Furthermore, this study stated as findings of this study are consistent with findings of Enofe (2013).

Whereas there are some contradictory results also can be found such as Banchuenvijit (2012) studies. Becker-Blease (2020) examined the relationship between firm size and profitability within 109 Standard Industrial Classification (SIC) four-digit U.S manufacturing industries. This study found that the relation between size and profitability is industry specific, but, regardless of the shape of the size profitability function, further they found that profitability is negatively correlated with the number of employees for firms of a given size measured in terms of total assets and sales. Banchuenvijit (2012) study used two types of firm size in term of total sales and in term of total assets, and some other explanatory variables to examine the influence on three types of profitability measures of return on assets (ROA), return on sales (ROS) and return on equity (ROE) in listed companies of Vietnam.

The result found the firm size in term of total assets is negatively related to ROA. Beyond this positive and negative relationship some of the scholars found insignificant influence of firm's size on firm's profitability. In this way, Skuras (2014) examined that the effect of capital subsidization on four dimensions of the financial performance of firms, that is efficiency, profitability, capital structure, and growth with the firm's specific factor of firm's size. Study provides evidence that insignificant effect of firm's size on firm's performance. One of the Pakistan study Rashid (2018) investigated the relationship between corporate governance and firm's performance of twenty firms listed at Karachi Stock Exchange. Performance of the firm is measured by two

measures of return on assets (ROA) and return on equity (ROE). And result reveals size of the firm's relationship in all the three models has remained insignificant. Consequently, when we considering these above contradictory findings regarding influence of firm's size on firm's profitability still it is ambiguity and empirical investigation is needed.

### 2.9 Empirical Review

There are many relevant empirical studies emanating from developed and developing countries. Gadi (2015) extended their study by examining corporate governance and financial performance of Micro Finance Banks in North Central Nigeria. Their study sampled 23 micro finance banks that board composition and composition of board committees have significant relationship with banks financial performance. Similarly, Uwuigbe (2015) studied 30 manufacturing companies quoted on the Nigerian Stock Exchange Market between 2003 and 2007. The findings portray a significant but weak link between board size and Manufacturing firms in Nigeria. In addition, Ogbachie & Koufopoulos (2010) investigated the correlation between corporate governance and board practices in the Nigerian banking industry. The result discovered that a standard board size comprising of all board committees is ideal for any organizational set up.

Similarly, Adebayo (2014) studied corporate governance and performance of organizations. The study adopted quantitative methodological framework. The finding showed that board size, board skills, management skills and size of audit committee are positively associated with performance in organizations. According to Aliyu (2015), who examined the link between corporate attributes of board size and market value of firms, using a sample of six companies, between 2004-2012. Results from the study indicate a negative correlation between board size and the market value of equity. In addition, Ammar (2013) examined Corporate governance and performance from the Pakistan context, the study utilized data from the website of Karachi stock exchange and financial statements of sampled listed companies for the period of five years 2007-2011. The findings revealed a positive association between board size and firm performance.

Ahmadu (2019) also their study assembled 93 firms between 1996 and 1999 from the Nigerian Stock Exchange and made use of the Pooled OLS regression analysis to analyze their data while controlling for size with the total asset of firms. Their results showed a positive relationship between firm financial performance and board size, expatriate CEOs, ownership concentration and debt. A negative impact was recorded for director shareholding, CEO status and square of ownership concentration proxying for non-linear relationship. Kajola (2018) who assembled only 20 non-financial firms between 2000 and 2006 also making use of the Pooled OLS regression analysis. His result also was positive for board size but negative for CEO. (Ahmadu, 2019) While a positive and statistical significant impact was also recorded for the CEOs status which was in agreement with Kajola's study and contrary to Ahmadu's work. In the case of board size, a perfect agreement with previous studies was recorded; a positive and significant impact was recorded by all the researchers.

Babatunde (2019) who assembled 62 firms between years 2002-2006. His study differed from previous ones in the methodology. He adopted a fixed and random effects method for his analysis. However, all his findings were not different from those of the earlier scholars. Moreover, no control variable was accounted for the model. These studies reported a perfect agreement in the role of board size on firm performance. They all reported that board size has a positive impact on board performance. More so, managerial shareholding was also unequivocally found to exercise an adverse effect on firm performance. Moscu (2013) conducted a study on the impact of board size on firm performance in Romanian listed company on the floor of the stock exchange. The study revealed that board size has a positive and insignificant on firm performance proxy by ROA and ROE. This means that an insignificant relationship exists between board size and firm performance in Romania listed firms. Based on the review literature, we therefore formulate hypothesis that board size has a significant impact on organizational performance.

Short (2019) investigated whether there is a nonlinear relationship between managerial ownership and business performance in UK. Business performance is measured based on return on shareholders' equity and market value. They employ the cubic model to investigate the relationship between the variables. With this model, the coefficients of managerial ownership variables will be able to determine their turning points (indicating the maximum and the minimum points of the managerial performance). Bello (2015) examined the relationship between managerial shareholders and firm performance in Thailand. The managerial shareholding is classified into three levels (25% -50%, 50%-75% and beyond 75%). This study compares these three levels of managerial shareholders with non-managerial controlling shareholders. The empirical finding revealed that there is no significant relationship between managerial shareholders and business performance based on the return on assets and the sales asset. Allen (2015) examined the relationship between non-executive directors and firm performance. They found out that there is no significant relationship between non-executive directors' representation and performance. Based on the review literature, we therefore formulate hypothesis that directors' share has a significant impact on organizational performance. Based on the review literature, we therefore



formulate hypothesis that director's share has a significant impact on organizational performance.

Yakubu (2015) found no significant relationships between earnings management and other attributes related to corporate governance such as audit committee activities. Researches on most of these variables have produced mixed evidences and results. Michael (2020) in a study investigating 21 failed and non-failed U.S firms board characteristics, found out that the size of the board in non-failed firms is large than the failed firms. They suggested that non-failed firms with a relatively larger board may utilize the board members' wide range of knowledge and background. Oba (2013) in a study conducted on twenty-five (25) listed insurance companies from 2007 to 2010, found that board size and audit committee size are negatively significantly associated with earnings management. A study carried out by Uwuigbe (2014) on 40 listed companies using judgmental sampling technique, found out that board size has a significant negative impact on earnings management.

Ebrahim (2017) following a study of some manufacturing firms listed in 2002, no significant relationship between board meetings and earnings management was found. Ebrahim (2017) posited that the frequency of board meetings may not be a perfect measure of board activity because the board increases the number of board meetings when facing urgent business circumstances. Singhal (2021) in their study from a sample of 3741 firm year observations between 2002 and 2004 found out that more frequent board meetings are negatively associated with earnings management. Raghunandan (2016) reported that the audit committees of firm subject to SEC enforcement actions or restating their quarterly reports are less likely to have frequent meetings than those of other firms. The committees of only 23 per cent of their problem companies met more than twice a year compared to 40 per cent for the other firms.

Raghunandan (2016) in an investigation on the association between US firm characteristics and the number of audit committee meetings, found out that there are more audit committee meetings in large firms, firms that have high outsider block-holdings, firms in litigious industries, or firms with more board meetings. The number of meetings (a proxy for diligence) has been used in prior research because inactive audit committees are less unlikely to monitor management effectively. Lin and Hwang (2020) in their meta-analysis study reported a significant negative relationship (at the 1 per cent level) between earnings management and the number of audit committee meetings, based on either unweighted or weighted tests. The fail-safe number exceeds the critical number of studies by a wide margin (218 versus 60), supporting a strong positive effect of an active audit committee in ensuring financial reporting quality. A study by Alghamdi (2012) among Saudi Arabia listed companies, found no significant relationship between audit committee meetings and the levels of discretionary accruals. The findings of this study tallies with similar studies which found no relationship existing between earnings management and audit committee meetings.

### 3. Methodology

Ex-post facto design was employed in the study. The secondary data for this study was obtained from annual reports of manufacturing sector and Nigeria Exchange Group Fact Book for 2011 to 2021. The population of this study includes the manufacturing companies in Nigeria. The population of the study will comprise all registered manufacturing Nigerian Exchange Group companies. The population of manufacturing companies is forty-two (42). The study adopted purposive sampling techniques. In the analysis, panel data was adopted. This is because the study combined time series and cross sectional data.

#### 3.1 Model Specification

The model for this study is given as:

$$RETA = \beta_{0it} + \beta_{1it} BODS + \beta_{2it} BODC + \beta_{3it} AUCS + \beta_{4it} DOWN + \beta_{4it} FSIZ + e_{it}$$

Where: RETA = Return on Assets;  $\beta_0$  = Intercept;  $i$  = cross section;  $t$  = Time;  $\beta_1$ -4 = Regression Coefficient; BODS = Board Size; BODC = Board composition; AUC = Audit Committee; DOWN = Directors ownership; FSIZ = Firm size;  $e$  = error term.

### 4. Results

#### 4.1 Descriptive Statistics

Descriptive statistics are brief informational coefficient that summarize a given data set, which can be either a representation of the entire population or a sample of a population. Descriptive statistics is broken down into measures of central tendency and measures of variability. It describes, shows, and summarizes the basic features of a data set found in a given study, presented in a summary that describes the data sample and its measurements. Table 1 presents the descriptive statistics on the corporate governance characteristics and firm performance. The summary statistics were used to compare the measures of central tendency, the measure of dispersion and the measures of normality of the data set.

The measures of central tendency compared the mean and minimum and maximum values of the data set. From the result, it could be observed that the mean values of Reta, bods, bodc, auc, down, fsize were respectively 4.21,

9.172249, 70.17764, 5.581731, 16.99948, 4.857476 and 4.857476. The minimum values were 179.92, 3, 25, 2, 0, and 2.75 for Reta, bods, bodc, auc, down, fsize. The standard deviation values of the variables were 15.02595, 2.97858, 13.62191, .9709282, 23.86796 and .8377728 for Reta, bods, bodc, auc, down, fsize. The maximum values for Reta, bods, bodc, auc, down, fsize were 108.9, 19, 100, 9, 88.44, and 6.81.

Table 1. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
reta	420	4.21	15.02595	-179.92	108.9
bods	418	9.172249	2.97858	3	19
bodc	416	70.17764	13.62191	25	100
auc	416	5.581731	.9709282	2	9
down	420	16.99948	23.86796	0	88.44
fsize	420	4.857476	.8377728	2.75	6.81

#### 4.2 Test for Normality

The Shapiro-Wilk test is most widely used method to test the normality of the data. From the table, it is used to determine whether the sample data have been drawn from a normally distributed population (within some tolerance). In this case, since the value of Shapiro-Wilk test is less than 0.05, the data significantly deviate from a normal distribution. It is concluded that the data is non-normal. When data distribution is not normal it may lack symmetry and may also have extreme values. Also, if the data is not normally distributed, these tests may not be valid and can lead to incorrect conclusions.

Table 2. Test for normality

Shapiro-Wilk W test for normal data					
Variable	Obs	W	V	z	Prob>z
reta	420	0.65298	99.803	10.978	0.00000
bods	418	0.96974	8.664	5.148	0.00000
bodc	416	0.97324	7.630	4.844	0.00000
auc	416	0.96719	9.354	5.330	0.00000
down	420	0.73974	74.849	10.292	0.00000
fsize	420	0.98288	4.923	3.801	0.00007

#### 4.3 Spearman Rank Correlation

From Table 3, it is shown that Spearman rank correlation measures the strength and direction of association between two ranked variables. It gives the measure of monotonicity of the relation between two variables i.e how well the relationship between the variables could be represented using a monotonic function. Monotonicity is the relationship that does one of the following (1) as the value of one variable increases, so does the value of the other variable; or (2) as the value of one variable increases; the other variable value decreases. On the other hand, monotonic function is a function between ordered sets that preserves or reverses the given order. The spearman rank correlation in the study measures the strength and direction of monotonic association between two variables. It is for ranking correlation between two ranked variables or a ranked variable and a measurement variable. The result indicates the spearman correlation coefficients range from -1 to +1. The sign of the coefficient indicates whether it is a positive or negative monotonic relationship. A positive correlation means that as one variable increases the other variable also tends to increase.

Table 3. Spearman Rank

Spearman rank correlation						
	Reta	bods	bodc	auc	down	fsize

reta	1.0000					
bods	0.1718	1.0000				
bodc	0.0388	0.2247	1.0000			
auc	0.1049	0.3785	0.0147	1.0000		
down	-0.2258	-0.2262	-0.0444	-0.0953	1.0000	
fsize	0.2542	0.6029	0.0093	0.4674	-0.3671	1.0000

#### 4.4 Pools OLS Regression

Pooled OLS is used to derive unbiased and consistent estimate of parameters even when time constant attributes are present, but random effect will be more efficient. In the result shown below, all members of the panel did not obey the exact same regression model. It has different coefficients and different constant. The observations at all time periods are cross-correlated.

Table 4. Pools OLS regression

Source	SS	df	MS	Number of obs	=	413
-----+-----			F(5, 407)	=	4.61	
Model	5044.03051	5	1008.8061	Prob > F	=	0.0004
Residual	89140.8374	407	219.019256	R-squared	=	0.0536
-----+-----			Adj R-squared	=	0.0419	
Total	94184.8679	412	228.604048	Root MSE	=	14.799
-----						
reta	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
bods	-.2482566	.3329961	-0.75	0.456	-.9028635	.4063503
bodc	.0032405	.0560227	0.06	0.954	-.1068894	.1133704
auc	-.1867292	.8581234	-0.22	0.828	-1.873637	1.500178
down	-.0736995	.031561	-2.34	0.020	-.1357424	-.0116565
fsize	3.757526	1.230375	3.05	0.002	1.338842	6.17621
_cons	-9.656628	6.559012	-1.47	0.142	-22.5504	3.237141

#### 4.5 Test for Multicollinearity

Multicollinearity test is used to diagnose the presence of multicollinearity in a model. It refers to a state wherein there exists inter-association or inter-relation between two or more independent variables. From the result, A VIF (Variance Inflation factor) of 1 mean that the variables are not correlated; a VIF between 1 and 5 shows that variables are moderately correlated and a VIF between 5 and 10 will mean that variables are highly correlated. Variance Inflation factor is a measure of the amount of multicollinearity in regression analysis. It is used in solving multicollinearity in a regression analysis.

Table 5. Test for multicollinearity

Variable	VIF	1/VIF
fsize	1.99	0.501283
bods	1.84	0.542969
auc	1.30	0.770492
bodc	1.09	0.917115
down	1.06	0.942803
Mean VIF	1.46	

#### 4.6 Test for Heteroscedasticity

Heteroscedasticity refers to situation where the variance of the residuals is unequal over a range of measured values. It shows if the p-value is below a certain threshold (common choices are 0.01, 0.05 and 0.10), then there is sufficient evidence to say that heteroscedasticity is present. Heteroscedasticity is used in testing fitted values of the model, the predictors in the model and a subset of the independent variables. From the result shown below, the p-value is 0.0000 and it is below threshold (0.01, 0.05 and 0.10), it is concluded that heteroscedasticity is present. The present of Heteroscedasticity means that the observations that are either small or large with respect to the other observations are present in the sample. The implication of  $1/VIF$  means variables are not correlated and multicollinearity does not exist in the regression model.

Table 6. Test for heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of reta

$\chi^2(1) = 200.18$

Prob >  $\chi^2 = 0.0000$

#### 4.7 Panel Fixed Effect

Panel fixed effect utilizes panel data to control for variables that differ across individuals or entities. It examines cross-sectional(group) and/ or time series(time) effects. This fixed effect assume that individual group/time have different intercept in the regression equation. The result of panel fixed effect shows hypothetical changes in the independent variables (counterfactuals) that could plausibly occur within units to avoid overstating the substantive importance of the variables effect. The fixed effect model result is the regression of various expressions of the corporate governance characteristics on firms' performance. From the result presented, the value of the intercept (-35.74) revealed that the performance of firms in Nigeria could increase (decrease) when all other variables are held constant. Further analysis of the fixed effect model result revealed that, the estimate coefficients of each independent variable shows that a percentage change in each will cause a corresponding percent increase on the performance of firms and was found to be statistically non-significant.

Table 7. Panel fixed effect

Fixed-effects (within) regression				Number of obs = 413		
Group variable: croid				Number of groups = 42		
R-sq:				Obs per group:		
within = 0.0524				min = 8		
between = 0.0912				avg = 9.8		
overall = 0.0447				max = 10		
				F(5,366) = 4.05		
corr(u_i, Xb) = -0.6308				Prob > F = 0.0014		
-----						
reta	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+						
bods	-.5234683	.4850274	-1.08	0.281	-1.477259	.4303219
bodc	-.1125397	.0670253	-1.68	0.094	-.2443427	.0192633
auc	-1.573554	1.053341	-1.49	0.136	-3.644914	.4978068
down	-.057442	.0514089	-1.12	0.265	-.1585358	.0436519
fsize	12.83475	4.43589	2.89	0.004	4.111724	21.55779
_cons	-35.74233	23.15828	-1.54	0.124	-81.28232	9.797659
-----+						

sigma_u	10.514005	
sigma_e	13.114896	
rho	.39124522	(fraction of variance due to u_i)
-----		
F test that all u_i=0: F(41, 366) = 3.71		Prob > F = 0.0000

#### 4.8 Panel Random Regression

Panel Random examines cross-sectional and time series effects. It hypothesizes individual group having different disturbance. It is used to estimate the effect of individual specific characteristics such as Reta, bods (-.31), bodc(-.080), auc(-.1.00), down (-.068), fsize (5.151) that are inherently unmeasurable. They are encountered in panel data studies. The result shows the effect of individual specific features on the response variable of the panel data set.

Table 8. Panel Random Regression

Random-effects GLS regression			Number of obs = 413			
Group variable: croid			Number of groups = 42			
R-sq:			Obs per group:			
within = 0.0470			min = 8			
between = 0.0844			avg = 9.8			
overall = 0.0475			max = 10			
			Wald chi2(5) = 17.90			
corr(u_i, X) = 0 (assumed)			Prob > chi2 = 0.0031			
-----						
reta	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
bods	-.3136934	.3995273	-0.79	0.432	-1.096753	.4693658
bodc	-.0806497	.0593559	-1.36	0.174	-.1969851	.0356857
auc	-1.003828	.9445433	-1.06	0.288	-2.855099	.8474423
down	-.0685144	.039903	-1.72	0.086	-.1467229	.0096941
fsize	5.154793	1.756278	2.94	0.003	1.712552	8.597035
_cons	-5.548081	8.999074	-0.62	0.538	-23.18594	12.08978
-----+-----						
sigma_u	6.7263793					
sigma_e	13.114896					
rho	.2082637 (fraction of variance due to u_i)					

#### 4.9 Test for Fixed Effect

In this case, test for fixed effect is typically done with either Wald or likelihood ratio. For test of fixed effect, the p-value will be smaller. Thus, if a p-value is greater than the cutoff value, you can be confident that a more accurate test would also retain the null hypothesis. For p-values that are only a little below the cutoff value, a more accurate approach would need to be used. From the result since the p-value (0.0000) is less than the cutoff value (66.20), therefore there is an accurate approach needed to be used.

Table 9. Test for Fixed Effect

Breusch and Pagan Lagrangian multiplier test for random effects

$$\text{reta}[\text{croid}, t] = Xb + u[\text{croid}] + e[\text{croid}, t]$$

Estimated results:

	Var	sd = sqrt(Var)
reta	228.604	15.11966
e	172.0005	13.1149
u	45.24418	6.726379

Test:  $\text{Var}(u) = 0$

$\text{chibar2}(01) = 66.20$

$\text{Prob} > \text{chibar2} = 0.0000$

#### 4.10 Hausman Test

Having estimated both the panel fixed effect and the random effect, it is then expected that one of the results would best appropriately address the study. Theoretically, this cannot be done using the rule-of-the-thumb or head-guess, thus, the study adopted the Hausman test as a basis for adopting the analysis that best addresses the study. The Hausman test is used to check whether the fixed effect or random effect is most suitable and appropriate. The Hausman test hypothesis holds that:

H0: random effect model is appropriate

H1: fixed effect model is appropriate

Decision rule: if there exist a statistically significant p-value, then the fixed effect model should be used, otherwise, the random effect model should be used. If the p-value is less or equals to 0.05, the null hypothesis should be rejected. Given that the p-value of the Hausman test in Table 10 is 0.0416, the study accepted the alternative hypothesis (fixed effect is most appropriate) and rejected the null hypothesis that, random effect model is most appropriate. As such, the fixed effect model is considered appropriate and adopted for this study.

Table 10. Hausman test

---- Coefficients ----				
	(b)	(B)	(b-B)	$\text{sqrt}(\text{diag}(V_b - V_B))$
	fe	re	Difference	S.E.
bods	-.5234683	-.3136934	-.2097749	.2750082
bodc	-.1125397	-.0806497	-.0318899	.0311331
auc	-1.573554	-1.003828	-.5697252	.466225
down	-.057442	-.0685144	.0110724	.0324133
fsize	12.83475	5.154793	7.679962	4.073403

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$\text{chi2}(5) = (b-B)'[(V_b - V_B)^{-1}](b-B)$

= 11.54

$\text{Prob} > \text{chi2} = 0.0416$

#### 4.11 Panel Least Square Dummy Regression

The result indicates that dummy variables are limited to two specific values, 1 or 0. Typically, 1 represents the presence of a qualitative attributes and 0 represents the absence.

Table 11. Panel least square dummy regression

Source	SS	df	MS	Number of obs	=	413
-----+-----			F(46, 366)	=	3.95	
Model	31232.6862	46	678.971439	Prob > F	=	0.0000
Residual	62952.1817	366	172.000496	R-squared	=	0.3316
-----+-----			Adj R-squared	=	0.2476	
Total	94184.8679	412	228.604048	Root MSE	=	13.115
-----						
reta	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
bods	-.5234683	.4850274	-1.08	0.281	-1.477259	.4303219
bodc	-.1125397	.0670253	-1.68	0.094	-.2443427	.0192633
auc	-1.573554	1.053341	-1.49	0.136	-3.644914	.4978068
down	-.057442	.0514089	-1.12	0.265	-.1585358	.0436519
fsize	12.83475	4.43589	2.89	0.004	4.111724	21.55779
croid						
2	6.60459	7.162837	0.92	0.357	-7.48089	20.69007
3	-4.646808	8.774957	-0.53	0.597	-21.90247	12.60885
4	-10.52518	8.413641	-1.25	0.212	-27.07032	6.019968
5	-9.136572	8.069314	-1.13	0.258	-25.00461	6.731466
6	-21.82713	7.136755	-3.06	0.002	-35.86132	-7.792939
7	30.20577	6.625469	4.56	0.000	17.17701	43.23453
8	12.29277	6.740215	1.82	0.069	-.9616386	25.54718
9	-12.15379	13.88087	-0.88	0.382	-39.45005	15.14248
10	-8.412824	10.69261	-0.79	0.432	-29.43948	12.61383
11	-6.230717	7.354687	-0.85	0.397	-20.69346	8.23203
12	-18.86681	11.97103	-1.58	0.116	-42.40744	4.673822
13	-20.10242	6.954038	-2.89	0.004	-33.77731	-6.427537
14	-5.307905	8.406829	-0.63	0.528	-21.83966	11.22385
15	-3.851681	7.32503	-0.53	0.599	-18.25611	10.55275
16	-14.49168	10.6467	-1.36	0.174	-35.42807	6.444698
17	-11.45518	9.457857	-1.21	0.227	-30.05374	7.14338
18	-.1356779	7.174926	-0.02	0.985	-14.24493	13.97358
19	-13.37489	9.76722	-1.37	0.172	-32.58181	5.832021
20	-8.193324	7.572721	-1.08	0.280	-23.08483	6.69818
21	-16.8812	12.26642	-1.38	0.170	-41.00271	7.240317
22	-1.953112	6.557007	-0.30	0.766	-14.84725	10.94102
23	-2.525914	6.948497	-0.36	0.716	-16.1899	11.13807
24	13.52356	7.103262	1.90	0.058	-.444768	27.49189
25	4.078427	6.646808	0.61	0.540	-8.992299	17.14915
26	-14.49577	7.006734	-2.07	0.039	-28.27427	-.7172568
27	2.790977	8.31031	0.34	0.737	-13.55097	19.13292
28	3.261562	6.795271	0.48	0.632	-10.10111	16.62424

29		-3.820219	10.42056	-0.37	0.714	-24.3119	16.67146
30		-16.2484	11.81604	-1.38	0.170	-39.48424	6.987451
31		-3.903961	6.894277	-0.57	0.572	-17.46133	9.653406
32		.5211255	7.267086	0.07	0.943	-13.76936	14.81161
33		3.25129	8.73974	0.37	0.710	-13.93512	20.4377
34		6.01608	6.404691	0.94	0.348	-6.578532	18.61069
35		-4.962341	9.214816	-0.54	0.591	-23.08297	13.15829
36		-14.91534	9.512576	-1.57	0.118	-33.6215	3.790826
37		-11.36123	7.627826	-1.49	0.137	-26.3611	3.638635
38		-19.39568	11.09293	-1.75	0.081	-41.20955	2.418194
39		2.714699	6.410315	0.42	0.672	-9.890971	15.32037
40		-17.05735	10.01727	-1.70	0.089	-36.75598	2.641272
41		-14.19126	9.36395	-1.52	0.131	-32.60515	4.222641
42		-3.09254	7.649082	-0.40	0.686	-18.1342	11.94912
_ cons		-30.31738	20.01392	-1.51	0.131	-69.67409	9.039336

Source: Annual Report of various companies and years.

## 5. Conclusion

The study examines corporate governance characteristics on the performance of manufacturing firms in Nigeria. The study revealed that Board size does not have significant effect on performance of the manufacturing firms in Nigeria; Board composition has a significant effect on performance of the manufacturing firms in Nigeria; Audit committee size has a significant effect on performance of the manufacturing firms in Nigeria; Board ownership does not have a significant effect on performance of the manufacturing firms in Nigeria. Corporate governance embodies structures, systems, mechanisms and framework through which organizations are directed and controlled by those saddled with the duties and responsibilities in the interest of shareholders and other stakeholders.

## 6. Recommendations

Based on the findings, the following recommendations were made:

- 1) Management should increase their board composition and also employ foreign directors on their board so as to enhance their firms' quality.
- 2) Board size of firms in Nigeria should not be too large and must be made up of qualified professional who are conversant with oversight function. There should also be a combination of self- government regulation so as to detect rule violations and also monitor systemic problems for early solutions.
- 3) Audit committee is considered one of the functional subcommittees on the board of organizations with the mandate of supervising and enforcing compliance with accounting and reporting policies. Therefore, reliable financial information should be based upon which investors and potential investors make informed economic decisions.
- 4) Directors should be able to provide independence expert judgment when dealing with the executive directors in areas such as pay awards, executive director appointment and dismissals.

## References

- Adebayo, O. A., (2014). Corporate Governance and its effects on the Nigerian Insurance Industry. *European Journal of Globalization and Development Research*, 8(1), 22-34.
- Aliyu, G. N., (2015). The impact of Corporate Board meetings on Corporate Performance in South Africa. *Africa Review of Economics and Finance*, 2(2), 23-45.
- Ahmadu, S., (2019). Outside directors: Board Independence and shareholder wealth. *Journal of financial Economics*, 1(1), 175-191.
- Alsawalhah, O., (2012). Corporate governance practices and firms' financial performance of selected manufacturing companies in Lagos State, Nigeria. *International journal of economics, finance and management sciences*, 2(5), 285-279.



- Allen, G., (2015). Implication of CG on the performance of deposit money banks in Nigeria. *Arabian Journal of Business & Management Review*, 2(10), 22-45.
- Ammer, L., (2013). Empirical research on accounting choice. *Journal of Accounting and Economics*, 3(1), 255-307.
- Alghamdu, S., (2012). Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44(1), 238-286.
- Brown, A., (2014). The impact of corporate governance characteristics on earnings quality and earnings management: Evidence from Jordan. *Jordan Journal of Business Administration*, 12(1), 187-207.
- Babatunde, D., (2019). Corporate Governance and Audit Quality in Nigeria: Evidence from The Banking Industry. *European Journal of Accounting, Auditing and Finance Research*, 5(1), 18-39.
- Bansal, F., Sharma, A., (2016). Corporate Governance and Earning Management of Deposit Money Banks in Nigeria. *International Journal of Scientific & Engineering Research*, 9(7), 22-55.
- Bello, D. L., (2022). Assessing the measure of quality of earnings: Evidence from India. *International Journal of Business and Management Review*, 7(5), 26-37.
- Banchuenvijat, M., (2012). The modern industrial revolution, exist and the failure of internal control system. *Journal of financial*, 48(3), 831-880.
- Beeker-Blease, W., (2020). Theory of the firm: Management Behavior. Agency costs and ownership structure: *Journal of financial economics*, 3(3), 305-360.
- Bilkisu, F., (2014). International financial reporting standards and foreign direct investment in Nigeria. *International Journal of Commerce, Business and Management*, 3(3), 446-449.
- Coles, K., Teny, B., (2014). Board of Directors' Characteristics and Financial Performance: A Case Study of selected Hotels and Restaurants in Sri Lanka. *Merit Research Journal of Accounting, Auditing, Economic and Finance*, 1(2), 18-25.
- Dogan, J., (2014). The Effects of Corporate Governance on the Performance of Commercial Banks in Nigeria. *International Journal of Public Administration and Management Research (IJPAMR)*, 2(2), 2346-7215.
- Enofe, D. P., (2013). Impact of corporate governance on financial performance of Microfinance Banks in North central Nigeria. *International Journal of Humanities Social Sciences and educational. Research Journal of Finance and Accounting*, 8(8), 12-23.
- Ebrahim, F.F., (2017). Ethics, corporate governance and financial reporting in the Nigerian banking industry: Global role of International Financial Reporting Standards. *Accounting and Finance Research*, 5(1), 50-63.
- Geraldine, W., (2017). Board Composition and Financial Reporting Quality of Deposit Money Banks in Nigeria. *International Journal of Innovative Finance and Economics Research*, 5(4), 97-104.
- Gadi, M., (2015). A modest proposal for improved Corporate Governance. *Business Lawyer*, 48, 59-77.
- Gabrielsen, O., (2012). Corporate governance mechanisms and earnings management in Nigerian food product companies. *Journal of Administrative and Business Studies*, 2017, 3(1), 1-9.
- Hwang, K., (2020). Corporate structure, ownership structure and earnings predictability: Malaysian evidence. *Asian Academy of Management Journal of Accounting and Finance*, 9(1), 1-23.
- Klappper, L., Love, I., (2014). Impact of Corporate Governance on the Profitability of the Nigerian Banking Sector. *ESUT Journal of Accountancy*, 7(1), 12-23.
- Kajola, A., (2018). Measuring Transparency and Disclosure at firm – Level in Emerging Markets. *Journal of Finance*, 24(4), 537-553.
- Karaduman, A., (2012). Corporate Governance and sustainable Banking sector: Evidence from Nigeria. *Research Journal of Finance and Accounting*, 5(12), 21-34.
- Kumolu, S., (2017). Earnings management using classification shifting: An examination of core earnings and special items. *The Accounting Review*, 81, 501-531.
- Moscu, O. R., (2013). The effects of Board Size on financial performance of Banks: A study of listed banks in Nigeria. *International Journal of Economics and finance*, 4(2), 12-23.
- Michael, A., (2020). Capital allocation and timely accounting recognition of economic losses. *Journal business finance and accounting*, 38, 1-33.
- Miles, C., (2022). Does enhanced disclosure really reduce agency costs? Evidence from the diversion of corporate resources. *The Accounting Review*, 87(1), 199-229.

- Mbu-Ogar, O., (2017). Corporate governance and national culture are Siamese twins: The case of Cadbury (Nigeria) PLC. *International Journal of Innovation of Business and Social Science*, 3(15), 269-278.
- Oba, W. K., (2013). Board composition and financial reporting quality of deposit money banks in Nigeria. *International Journal of Innovative Finance and Economic Research*, 5(4), 97-104.
- Oyejide, C., Soyiba, S., (2021). Financial reports quality and corporate social responsibility. *Asian Economic and Financial Review*, 5(3), 453-467.
- Ogbeide, S., Igbinsola, J., (2015). Board Characteristics and Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Business and Social Science*, 7(9), 12-34.
- Ogbechie, C. & Koufopoulos, D. N., (2010). Corporate Governance and Board Practices in Nigerian Banking Industry. Available through [www.cogbechie@ibs.edu.ng](mailto:www.cogbechie@ibs.edu.ng) or [Dimitrios.koufopoulos@brunel.ac.uk](mailto:Dimitrios.koufopoulos@brunel.ac.uk) /downloaded on the 15 September 2015.
- Rezaee, A. S., (2019). Board characteristics, independent audit committee and financial reporting quality of oil marketing firms: evidence from Nigeria. *Journal of Finance, Accounting and Management*, 6(2), 34-54.
- Rashid, M. S., (2018). Positioning Stakeholders Theory within the Debate on corporate Social Responsibility. *Electronic Journal of Business Ethics and Organization studies*, 12(1).
- Raghunandan, A. A., (2016). An empirical investigation of the financial reporting practices and bank's stability in Nigeria. *Kuwait of Arabian Journal of Business and Management Review*, 2(5), 157-180.
- Rose, M., (2017). The impact of intellectual capital on earning quality: Evidence from Malaysian firms. *Australian Journal of basic and applied sciences*, 7(2), 535-540.
- Rogers, J., (2018). Cost of Equity and Earnings attitude. *The Accounting Review*, 79(4), 967-1010.
- Sanisi, H., (2015). Bank Board Structure and Performance: Evidence for Large Bank Holding Companies. *Journal of Financial Intermediation*, 21, 243-267.
- Shleifer, M. C., (2017). Theory of the firm: Managerial Behaviour, agency costs and capital structure. *Journal of Financial Economics*, 3(1), 305-360.
- Singhal, K., (2021). Trend analysis of earnings quality among listed companies in Nigeria. *Journal of emerging Trends in Economics and Management Sciences*, 8(1), 62-74.
- Sanda, O. A., (2013) Evaluating the effects of corporate governance on the performance of Nigeria Banking Sector. *Review of contemporary Business Research*, 1(1), 32-42.
- Skuras, K., (2014). Corporate Governance and board effectiveness: *Journal of Banking and finance*, 2(2), 371-403.
- Short, C., (2019), Governance structures, size and corporate performance in UK firms. *Management Decision*, 37(5), 457-64.
- Uwuigbe, R. C., (2015): An analysis derivation of the cost of deposit insurance and Loan guarantees: An application of modern option pricing theory. *Journal of Banking & Finance*, 1(2), 3-11.
- Yermack, H. A., (2015). The persistence of earnings and corporate governance in IPO firms. *Journal of Global Business*, 1(1), 47-56.
- Yakubu, I., (2015). Corporate Governance and Income Smoothing in the Nigerian Deposit Money Banks. *International Journal of Business & Law Research*, 6(1), 27-38.
- Zabihollah, A., (2019). Audit Committee Independence, Size and Financial Reporting Quality of Listed Deposit Money Banks in Nigeria. *Journal of Business and Management*, 20(2), 40-47.

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).