Corporate Governance Attributes and Financial Performance of Listed Industrial Goods Companies in Nigeria

JONAH, Ngbomowa Moses PhD.
Department of Accountancy, Faculty of Management Sciences
Rivers State University,
Nkpolu, Port Harcourt, Rivers State. Nigeria.
E-mail: ngbomowa.jonah@ust.edu.ng

DOI: 10.56201/jafm.v9.no5.2023.pg18.45

Abstract
Corporate governance is the system by which the affairs of the companies are directed and controlled by those charged with the responsibility. The purpose of this study is to investigate the relationship between corporate governance attributes and the financial performance of listed industrial goods companies in Nigeria. The methodology adopted in this study was an ex-post facto research design. Secondary data from eleven (11) listed industrial goods companies in Nigeria for the period of eleven (11) years (2009-2019) was obtained based on the convenience sampling method. The statistical tools used were multiple regression analysis and Pearson's product-moment correlation aided by the statistical package for social science (SPSS) version 22. The finding showed that corporate governance had a significant positive relationship with financial performance. Likewise, the board size, board composition and board member competence have a positive relationship with net profit margin. It was concluded that corporate governance attributes influence the financial performance of listed industrial goods companies in Nigeria. It was recommended among others that external auditors should be mandated to issue certificates of compliance with the code of corporate governance for public companies as it is obtainable in some countries like India. Likewise, Appraisal tools for regular monitoring of boards of directors should be developed to help create credibility in corporations in Nigeria. Competent outside directors with requisite experience should be appointed to the board at all times necessary.

Keywords: *corporate governance attributes, the board size, board composition, board members competence, financial performance, net profit margin, returns on the asset.*

INTRODUCTION

The necessity of corporate governance for the efficient and effective performance of an organization cannot be overemphasized due to the tendency for managers and some other stakeholders to engage in business practices that may be unethical thereby undermining the right of less informed stakeholders in corporate organization. These unethical practices could be tampering or manipulating financial statements to give the false impression of good corporate health to users of the report in making decisions.
Adekunle and Aghedo (2014) opined that corporate governance is aimed at promoting corporate transparency, fairness, and accountability. It is an effective management relationship to promote

organizational integrity to enhance firm performance. Ademola and Moses (2016) assert, that corporate governance involves the system of control, rules, policies, processes and proceedings set up by the management and board of the corporation to ensure the adequate running of the enterprise, thereby maximizing shareholders' wealth and satisfying the interest of all stakeholders. Stephen and Benjamin (2013), opined that corporate governance failure in the past has made many companies around the world even those faulted as too big to fail, experience crises and scandals that led to their end. Notable among such company scandals are Enron, WorldCom, Arthur Anderson and Adelphia.

In a related development Apodore and Zainol (2014), assert that the incessant financial scandals, crises and wreckage of organizations around the world are so alarming that the global financial market has been greatly destabilized, the employee loses their job, capital providers lose their investment, tax collection shrank and the growth of the economies impeded. These scandals had placed significant doubt on the abilities of the stock market authorities, policymakers, corporations, and professional accountants to properly regulate corporate behaviour. Notable organizations are; Arthur Anderson, Enron, Kmart, Adelphia Communication, and WorldCom are a few of the numerous international organizations that have collapsed because of the heightened crises. The sustained crises have not left Nigeria out of the whole saga. It affected companies such as Intercontinental Bank, Oceanic Bank, Cadbury, liver brothers (now Unilever) and others, thereby contributing to the downturn of the economy. These high-profile corporate failures intensified the debate on the effectiveness of corporate governance as a tool for improving the financial performance of firms and protecting investors' investments (Oyedokuun & Bamigbade 2017). With all of these companies, sustainability has become an issue in determining the survival and continued growth of a country.

The priority of any enterprise is to effectively, efficiently and ethically manage the resources of the company for profitability, long-term growth and perpetual existence. The practices and policies of management must be aligned with the interest of shareholders and other stakeholders. Thus, the development of good corporate governance is essential to protect corporate stakeholders and maintain factors for control and prevention of collapse and long-lasting economic depression in the achievement of business objectives. Corporate governance is a major factor and it is concerned with the relationships that exist among a firm's management, board of directors, shareholders and other stakeholders, (Olayiwola, 2018). Naz and Naqvi (2016), stated that financial performance reflects business sector outcomes and indicates the overall financial health of the firm over a period. It shows how well an organization is utilizing corporate resources to maximize the wealth of shareholders. Financial performance is the extent to which a company's financial health over a period is measured to provide information to shareholders as well as stakeholders for effective decision-making. Managing risk and increasing the profitability of an entity within corporate governance compliance is the essence of making good decisions. Financial performances show the ability of an organization to control and manage its resources. Measures of financial performance among others return on assets, return on equity, liquidity ratio, earnings before interest and tax, net profit margin and current ratio, (Fatihudin & Mochklas 2018).

Stability and good management can be achieved if an organization incorporates corporate governance that complies with rules, regulations and stipulated standards. Sound corporate governance increases the efficiency, and value of an organization on the stock market, and boosts the confidence of all stakeholders. Good corporate governance enhances accountability, and

transparency ensures efficient and effective use of limited resources, creates competitiveness, and attracts and retains investors, (Arinze, 2013). In developing countries, corporate governance's importance is to strengthen the foundation of society and help improve the global economy. The argument had been that no firm performance would be better than its corporate governance practice quality. In essence, corporate governance can ascertain the performance of an entity (Kālu, 2016). Most of the literature consulted has one common point that promoting good corporate practices will increase firm value (Delima *et al*. (2017), James *et al*. (2017), Goel (2018), Velmanpy (2018), Ahmed *et al*,(2019), Balagobei (2018). Some past studies have linked corporate governance to profitability, (Kalu (2016), Babatunde and Akeju (2016), Okoye *et al*. (2016), Monika and Gaurau (2015) etc.). Corporate governance and financial performance had gained widespread prominence. Many scholars have investigated corporate governance and financial performance with mixed founding (Balagoebi (2018), Nhung *et al*, (2017), Delima *et al*, (2017), James (2017), Ahmed (2019), Mugisha (2015). However whether corporate governance influences financial performance is another question that the answer is not clear, without concurrence among researchers. Yet to the best of our knowledge, there is no known work on corporate governance attributes and financial performance of listed industrial goods companies in Nigeria. Hence there exists a gap that needs to be filled, it is against this background that this study on corporate governance attributes and the financial performance of listed industrial goods companies in Nigeria is undertaken to determine the relationship between corporate governance attributes and the financial performance of listed industrial goods companies in Nigeria
.

STATEMENT OF THE PROBLEM

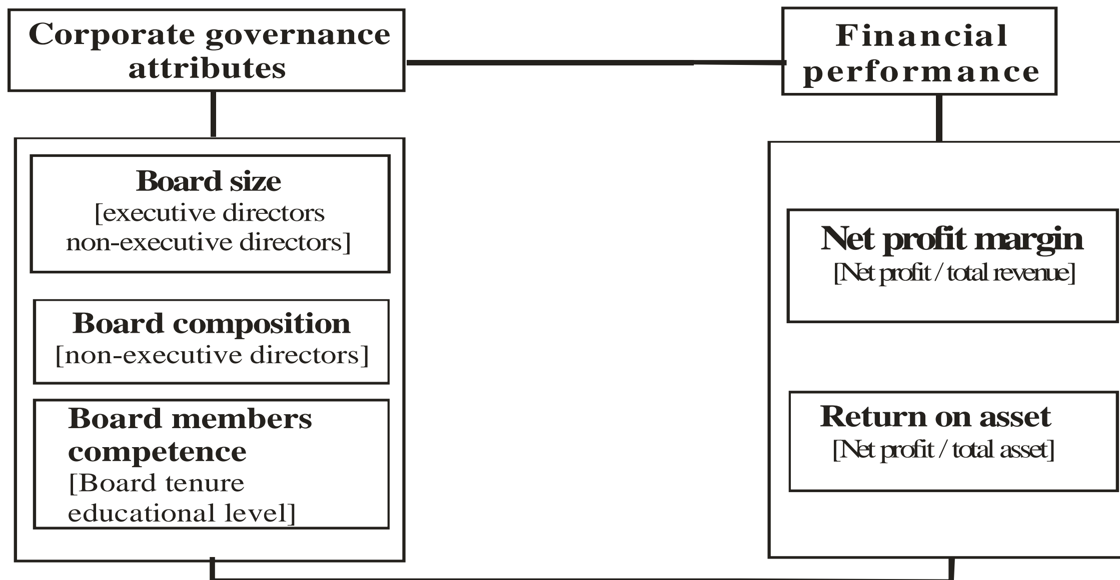
The world has witnessed the failure of large corporate organizations that have been attributed to large-scale fraud by directors in connivance with auditors. There is the case of Enron in the U.S., Paramalat in Italy and many cases in the U.K such as Polly Peck and max well communication. Nigerian as a country is not immune (left out) in this scenario; in the past companies like the oceanic bank, intercontinental bank, liver brother (now uniliver) among other has been affected. Apodore and Zainol (2014), assert that the incessant financial scandals, crises and wreckage of organizations around the world are so alarming that the global financial market has been greatly destabilized, employee lose their job, capital providers lose their investments, tax collection shrank and the growth of the economies impeded.

The failure of corporate organizations brought about a lack of public confidence in corporate organization audit reports, thereby making investors sceptical about investing their resources in corporate organisations. Poor corporate governance is attributed to inefficient firm financial performance as it results in low profit, return on asset and return on equity, however, good corporate governance guarantees that shareholders will get the best performance for their investment resulting in wealth increase and general economic growth.

The need to find out how corporate organisations can be properly managed to bring back the confidence of investors and improve economic growth necessitates this study. Hence, there is a need for the study of corporate governance attributes and financial performance of listed industrial goods companies in Nigeria.

CONCEPTUAL FRAMEWORK

The conceptual framework relevant to corporate governance attributes and financial performance of listed industrial goods companies in Nigeria is schematically presented below.



OBJECTIVES OF THE STUDY

This study aims to investigate the relationship between corporate governance attributes and the financial performance of listed industrial goods companies in Nigeria. The specific objectives are to:

1. ascertain the relationship between board size and net profit margin of listed industrial goods companies in Nigeria.
2. ascertain the relationship between board composition and net profit margin of listed industrial goods companies in Nigeria.
3. ascertain the relationship between board members' competence and the net profit margin of listed industrial goods companies in Nigeria.
4. ascertain the relationship between board size and return on assets of listed industrial goods companies in Nigeria.
5. ascertain the relationship between board composition and return on assets of listed industrial goods companies in Nigeria.

6 ascertain the relationship between board member's competence and return on assets of listed industrial goods companies in Nigeria.

RESEARCH HYPOTHESES

This research work is guided by the following hypotheses in line with the objectives of the study:

1. Ho1: There is no significant relationship between board size and net profit margin of listed industrial goods companies in Nigeria.
2. Ho2: There is no significant relationship between board composition and net profit margin of listed industrial goods companies in Nigeria.
3. Ho3: There is no significant relationship between board members' competence and the net profit margin of listed industrial goods companies in Nigeria.
4. Ho4: There is no significant relationship between board size and return on assets of listed industrial goods companies in Nigeria.
5. Ho5: There is no significant relationship between board composition and return on assets of listed industrial goods companies in Nigeria.
6. Ho6: There is no significant relationship between board members' competence and return on assets of listed industrial goods companies in Nigeria.

STAKEHOLDER THEORY

Freeman (1984) developed the stakeholder theory at the University of Virginia which emphasized the need for managers to have corporate accountability to stakeholders instead of shareholders. Freeman stated that stakeholders are group or individual that can affect or is affected by the achievement of a corporation's purpose. The starting point for stakeholder theory is the assumption that doing business requires values and that it is that shared sense of the created value that draws together the business. Freeman believed that this propels the firm forward and allows it to generate outstanding performance.

Stakeholder theory argues that every legitimate person or group participating in the activities of an organization does so to obtain benefits and that the priority of the interest of all legitimate stakeholders should be assured (Kalu, 2016. Stakeholders are all legitimate parties to an organization which ensure that the needed resources for meeting the ultimate objectives of the enterprises are constantly flowing in the desired direction in the best interest of the overall groups. It is on this premise that the concept of collective responsibility is anchored. It sees every legitimate party to the business as an integral part of the business, such that an injury to a party is an injury to all, and an injury to the business is an injury to all. Therefore the theory believes that firm performance is a general concern; and not a specific group (Donaldson & Preston, 1995).

The stakeholder theory proposes the representation of various interest groups on the company's board to ensure consensus building and avoid conflicts. The board serves as arbitration over the conflicting interests of the stakeholder and brings about the cohesion necessary for the company's achievement of objectives (Donaldson *et al.,* 1995). Despite the good intention of the theory it was criticized as a burden to make managers accountable to many stakeholders. The stakeholder's theory of corporate governance had also been criticized on the ground that it may result in abuse of the director's discretion assuming that limits were not placed on the stakeholder group, managers serving self-interest may always claim acting in the shareholder interest while acting on their selfish interest by increasing their powers (Cornfield, 1998). Another defect while making managers accountable to an undefined group of stakeholders will make them in effect accountable to none since there is no benchmark to measure their performance (Pandey & Ansani, 2014).

The main aim of corporate governance as stated by the theory of stakeholder rest with the board of directors and other external stakeholder within the environment where the company is accountable. The board of directors alleviated the potential conflict of interest among different stakeholder groups. It is inferred that the theory of stakeholders is to provide a balancing act to avoid conflict of interest and ensure that all stakeholders are considered. The stakeholder theory is relevant to our study because it gives an idea about how business works. The theory argues that for any organization including industrial goods companies to succeed in business, such an organization should be able to create value for customers, suppliers, employees, communities, financiers, government, and shareholders among others. This means that, the needs of all parties in the organization should be taken into consideration and that we cannot look at one of these stakes or interests in isolation. Hence we suggest that the success of industrial goods companies depend on the creation of value for all stakeholders' interest in the organization because each of these stakeholders has a role to play in achieving organizational goal, it is based on these that the study anchored on stakeholder theory

EMPIRICAL REVIEW

Ahmed and Durga (2019) evaluated corporate governance and firm performance in Saudi Arabia. The specific objectives were to ascertain the relationship between board size, bank size, board independent audit committee meeting and return on equity, return on asset as well as Tobin Q. The proxies for the predictor variable used are board size, board independence, board meeting, board committee number, audit committee size, audit committee meeting, audit committee independence and foreign board membership, whereas the referent of the criterion variable used is the return on asset, return on equity and Tobin's Q, while the control variable used is firm size and age. The research design used was descriptive, and secondary data were used for the study. The population of the study consist of all banking industries in Saudi Arabia. Data for the study was obtained from twelve (12) banks listed on the stock exchange of Saudi Arabia from 2014 to 2017. The method of data analysis includes descriptive statistics, Pearson correlation and regression. The finding of the study showed a significant positive association between board size, bank size and audit committee meeting with return on equity. Also, a positive relation was observed between bank size and board size with return on asset, negative relation was noticed between board independence and return on equity, likewise a significant positive association between board independence, board size and bank size with Tobin's Q whereas bank age and board committee negatively influenced Tobin's Q.

Eissa et al. (2019) researched the impact of corporate governance mechanisms on the financial performance of hotel companies in India. The specific objective of the study was to determine the relationship between board size, board composition, institutional ownership and net interest margin as well as earnings per share. The proxies of corporate governance used include board of director size, composition, diligence, audit committee size, composition, diligence and institutional ownership. The referent of financial performance variable use includes return on assets, earning per share and net interest margin. The study used a secondary source of data, the study population consist of all listed hotels in the Bombay stock exchange in India. The data for analysis were collected from the annual report of thirty (30) selected hotels through a judgemental sample from 2014 to 2016. The collected data were analysed using descriptive statistics, multiple regression and correlation analysis. The result showed that board size, board composition and institutional ownership had a significant negative association with return on

asset whereas board diligence, audit committee diligence, audit committee composition, audit committee size and firm size positively influence return on asset. The finding also showed that board size, board composition, institutional ownership, hard positive significant with net interest margin while the whole dimension of corporate governance had a significant positive association with earnings per share.

Gideon et al. (2019) investigated corporate governance and financial performance in Nigeria. The specific objective of the study was to evaluate the relationship between board size, board activism and return on assets. The proxies for corporate governance variable used include board size, board activism, and committee activism whereas financial performance was proxy with return on assets. A secondary data source was used which was obtained from annual reports of multinational firms from 2012 to 2016. The data were analysed using descriptive statistics, correlational and panel regression analysis. The result of the empirical analysis showed that board size had a significant negative association with return on asset, likewise, board activism (number of board meeting) negatively influence return on assets whereas committee activism has a significant impact on performance. The study concludes that corporate governance influences the return on assets negatively. It was recommended that the dynamics of corporate governance should be considered to give credence to more than just the number of people or meetings held.

Joshua et al. (2019) investigated the effect of corporate governance on financial performance in Nigeria. The specific objective of the study was to determine the influence of board composition, bank size and audit committee on return on assets. The proxies of corporate governance variables are board composition, board size and audit committee, while return on asset was used as the dependent variable. Agency and resource dependency theories were used for the study. The study employed the use of an ex-post facto research design. Secondary data used for the study was obtained from annual reports and accounts of fifteen (15) commercial banks listed on the stock exchange of Nigeria from 2007 to 2016. The analysis was done using correlation and pooled regression. The empirical finding depicted that board composition, bank size, and audit committee had a positive significant relation on return on asset whereas board size had an insignificant positive association on bank performance. The study concluded that return on assets as a measure of performance can be influenced by the audit committee and board composition. It was recommended that an average of fourteen (14) board members of executive and non-executive members with competence, experience and credential would aid effective decisions resulting in efficient performance. The Bank audit committee should meet regularly and review financial reports, and make recommendations to improve bank performance.

Yameen et al. (2019) evaluated the impact of corporate governance practices on a firm's performance in India. The specific objective of the study was to evaluate the influence of board size and audit committee size on the performance of the firm. The proxies of corporate governance variables used included board composition, board size, audit committee size, board diligence, foreign ownership, audit committee composition and audit committee diligence. The dimensions of the criterion variable used include return on assets, return on capital employed and Tobin Q and the control variable used was the firm size and firm age. The research design used for the study was descriptive. Secondary data was used for the study. The data for analysis were obtained from thirty-nine (39) hotels out of the fifty-three (53) hotels listed on the Bombay stock exchange from 2014 to 2016 years. The collected data were analysed using descriptive statistics, correlation and multiple regression analysis. The result of the analysis indicated that audit committee size and board of director size had a significant negative association with the

performance of Indian-listed hotels. The study also discovered board composition, audit committee composition, foreign ownership and audit committee diligence positively influence performance.

Agbaeze and Ogosi (2018) investigated the corporate governance and profitability of Nigerian banks. The specific objectives of the study were to determine the influence of the board of directors on profit after tax and bank employees. The referent of corporate governance used was a board of directors whereas profitability was proxy with profit after tax and the total number of bank employees was used as the control variable. The methodology used was an ex-post facto research design. Secondary data was employed in the study and the population of the study comprises all the twenty-one (21) banks in Nigeria. Data were obtained from a purposive sample of five (5) banks covering the period 2005 to 2015 and the data were analysed using regression analysis. The finding showed a significant positive association between the number of board members with profitability. Likewise, the number of an employee had a significant positive relationship with profitability. The study concluded that corporate governance affects the profitability of Nigerian banks. It was recommended that proper attention be given to enlightenment on good corporate governance.

Aktan et al. (2018) investigated the corporate governance and performance of financial firms in Bahrain. The specific objectives of the study were to ascertain the relationship between board sizes, ownership concentration and auditor reputation on return on asset. The dimension of corporate governance variables used are; board size, ownership concentration, independent director, auditor reputation, chief executive officer duality, and number of board meetings. Likewise, return on asset, return on equity and stock return were the proxies of the dependent variable used as the control variable was firm size and leverage. The study used secondary data, which was sourced from annual reports of fifteen (15) listed financial firms from 2011 to 2016 years on Bahrain Bourse. The methods of data analysis adopted for the study were descriptive statistics, correlation analysis and multiple regressions. The result of the empirical analysis revealed that board size, auditor reputation and ownership concentration significantly influence return on asset positively, a significant negative association was discovered among number of the board meeting and independent directors with return on asset. The study also revealed board size had positive relation and independent directors had negative significant relation with return on equity. Chief executive officer duality, firm leverage and size had no effect on return on asset, return on equity as well as stock return. The study concludes that corporate governance influences the performance of firms in Bahrain.

Balagobei (2018) investigated corporate governance on firm performance in Sri Lanka. The specific objectives of the study were to ascertain the relationship between board size, audit committee and board independence on firm performance. The measures of the independent variable used are board independence, the board size, chief executive officer duality, audit committee and director ownership likewise the dependent variable measures return on assets and Tobin's Q. The methodology adopted was cross-sectional research design. Secondary data was used for the study, the data were collected through a random sampling technique of fifty (50) out of two hundred and ninety-five (295) firms listed in the stock exchange of Colombo for the years 2010 to 2015. The method of analysis used was Pearson correlation and multiple regressions. The finding shows a significant negative relationship between board sizes, audit committee size and firm performance, meaning that smaller board sizes influenced the performance of the firm. Likewise, board independence, director's ownership and chief executive of officer duality do not

significantly influence firm performance. The study concluded that small board size impacts the performance of listed Sri Lanka firms.

Dosunmu et al. (2018) investigated corporate governance and banking sector performance in Nigeria. The specific objectives of the study were to determine the influence of board size and board composition on return on assets. The proxies of corporate governance used are board size, executive and non-executive board composition whereas return on asset, profit level and interest rate margin were proxies for performance. The descriptive research design was adopted. Secondary data was used for the study, which was obtained from the central bank of Nigeria from 2012 to 2016. The method of data analysis used includes descriptive statistics and correlational analysis. The finding of the study indicates that board size had an insignificant negative relation with return on assets, however, non-executive board members had a negative relation with return on assets meaning that an increase in non-executive board members lead to a reduction in financial performance. Whereas executive board members had a positive association with performance meaning that an increase in executive members will lead to improve performance of banks in Nigeria. The study concludes that corporate governance influences bank performance. It was recommended that executive members' upward review is necessary to enhance management efficiency.

Goel (2018) investigated the implication of corporate governance on financial performance in India. The specific objectives of the study were to determine the influence of the corporate governance index on return on asset and return on equity. The study used the corporate governance index as the proxy of corporate governance while return on asset, return on equity and Tobin Q, firm size was used as the control variable. The study anchored on stakeholder theory. The research design adopted was an analytical research method. The secondary sources of data were used for the study covering the two-reform period in India such as 2012 to 2013 and 2015 to 2016. The statistical tools used for the study were descriptive statistics and ANOVA. The result of the finding showed a significant relationship between the integrated framework of total corporate social performance and financial performance in period 1 whereas in period 2 corporate governance reforms do not impact financial linkage in the Indian market. It was concluded that Indian companies have made important development in corporate governance after the introduction of the reform.

Kamau (2018) studied corporate governance and the performance of financial institutions in Kenya. The specific objectives of the study were to determine the relationship between board skill and board committee on firm performance. Stakeholder and agency theory was used to back the study. The methodology adopted was a cross-sectional survey design. The primary data source was used. The population of the study comprise two hundred and seventy-one (271) financial institution in Kenya of which a sample of one hundred and sixty-two (162) was used for the study. The data were collected using a structured questionnaire. A five-point Likert scale, corporate index and ratio were used to measure the variable. The collected data were analysed using sample regression analysis. The result of the finding showed that board skill had a positive significant relationship with firm performance; board committee has a strong negative relationship with firm performance. However, board independence, board diversity and board size had no significant relationship with firm performance. The study concluded that the possession of requisite skills should be considered in the appointment of board members.

Olayiwola (2018) carried out a study on the effect of corporate governance on the financial performance of listed companies in Nigeria. The specific objectives of the study were to

determine the relationship between board size, board composition and audit committee size on net profit margin. The proxies used for the independent variable of corporate governance were board size, board composition and audit committee size, while the dependent variable (financial performance) was proxies with net profit margin. The agency theory was used in the study. The methodology adopted in the study was an exploratory research design, the data used in this study were secondary data derived from annual financial reports of selected companies in Nigeria, and statistical tools used include mean, median and standard deviation. The analysis of formulated hypotheses was tested using panel data regression from secondary data collected through the purposive sampling technique of ten listed companies for a period of seven years (2010 to 2016). The result revealed a significant negative correlation between board size and net profit margin, likewise, board composition influences net profit margin positively. In the same manner audit committee size insignificantly correlate with net profit margin. However, audit committee size, board size and board composition jointly had a significant influence on the net profit margin. It was concluded that the board size should be small in other to improve performance and that the board composition should be made of non-executive directors and the audit committee should be reviewed with committee members drawn from competent shareholders.

Rekha (2018) carried out a study on does corporate governance affect financial performance in India. The specific objectives of the study were to determine the influence of board size and female directors on return on equity. The proxies of corporate governance used include board size, chief executive officer duality, board committees, female directors, average remuneration and board meeting whereas financial performance was proxy by return on equity. The methodology adopted was a cross-sectional research design. The study adopted secondary data, and the study population involved banks in India. The data were collected from the annual report of nine (9) selected banks based on judgemental sampling covering a period of 2008 to 2015. The method of data analysis employed were descriptive statistics, and panel regression analysis. The result of the finding revealed that board size positively relates to performance meaning a large board influence financial performance positively; chief executive officer duality had a significant positive association with a measure of performance. However female directors had a significant negative association with bank performance, meaning that a small number of female board members, affect financial performance negatively. The study concludes that corporate governance affects financial performance in Indian banks.

Velnampy (2018) conducted a study on corporate governance and corporate profitability of listed diversified holding companies in Sri Lanka. The specific objectives of the study were to determine the influence of board size and board composition on depth-to-equity ratio and firm size. The dimension of the independent variable used is chief executive officer duality, board composition and board size whereas the return on asset was used for the dependent variable while the firm size and debt to equity ratio were used as control variables. The descriptive research design was used for the study and the data source was secondary. The population of the study comprises listed companies in the diversified holding sector of Sri Lanka. Seventeen (17) out of the twenty (20) companies listed in the Colombo stock exchange were taken based on the availability of data. The secondary data used were obtained from the annual report and account of the selected companies for the period 2011 to 2016. The collected data were analysed using descriptive statistics, Pearson correlation and multiple regression analysis aided by the software package E-view 08. The result of the finding showed that board size and board composition had a positive significant relationship with profitability, meaning that a large board size increase

firms performance. The study concluded that corporate governance influences profitability and that chief executive duality reduces board supervision of management and increases agency costs. The study recommended that there should be an improvement in the corporate governance implementation of diversified holding companies in Sri Lanka to increase profitability.

Yilmaz (2018) investigated corporate governance and financial performance relationship in Oman companies of the Muscat securities market. The specific objectives of the study were to determine the relationship between board size and board independence on net profit margin, return on asset and return on equity. The referent for the predictor variable used was board size, board independence, number of meetings, institutional ownership and block ownership while the dimension for the criterion variable used was net profit margin, return on asset, return on equity and earnings before interest and tax. The theory upon which the study was based was agency theory. The methodology adopted was panel data regression and content analysis; the secondary source of data was used for the study, the data for the index were collected through content analysis of the report of corporate governance published in the annual report, and the statistical tools employed in the study was descriptive statistics. The analysis of the stated hypotheses was done using multiple regression with a market-based indicator (Tobin Q) on secondary data obtained from 61 companies quoted on the Muscat securities market from 2013 to 2016. The result revealed that board size influences financial performance significantly and that the number of board members does not in any way affect financial performance. Board independence significantly influences net profit margin negatively, which entails an inverse relationship with financial performance. Institutional ownership showed a positive significant association with return on asset, net profit margin and earnings before interest and tax. On the other hand, block ownership showed a negative significant relationship among net profit margin, earnings before interest and tax and return on equity. Likewise, the number of meetings had a weak negative significance on financial performance. However firm sizes as the moderator variable significantly influence the relationship between corporate governance and financial performance. The study concluded that corporate governance and financial performance relationship is weak in Oman which may be because of poor application and adoption of corporate governance code. It was recommended that a code of corporate governance should be applied in Oman companies.

Ashraf *et al.* (2017) researched the impact of corporate governance on firms' financial performance in Pakistan. The specific objectives of the study were to evaluate the influence of board size and non-executive, directors on return on asset and return on equity. The dimension of corporate governance variables used include board size, board meetings, executive director, non-executive directors and chief executive officer duality, whereas the proxies of firm performance used return on assets, earning per share and return on equity. The cross-sectional research design was used, secondary data was used for the study and the population of the study comprise fifteen (15) companies in the textile sector listed on the Karachi stock exchange. The data used were collected from audited financial statements of fifteen (15) listed textile companies from 2005 to 2014. The method of analysing the hypotheses formulated are Pearson correlation coefficient and regression aid by E-view software. The finding showed a significant positive association among non-executive directors, executive directors and board size with return on asset, return on equity and earning per share. Likewise, chief executive duality indicated a positive relationship with earnings per share, as well as return on equity and board meetings, show a negative association with earnings per share. The study concludes that corporate governance increase from

performance in the textile firm in Pakistan. The study recommended that future studies should employ more corporate governance variables.

Babar et al. (2017) conducted a study on corporate governance and firm performance in Pakistan. The specific objectives of the study were to determine the influence of board size and audit committee on net profit margin and return on equity. The proxies for the predictor variable used were board size, annual general meeting, audit committee and chief executive officer duality, while the referent for the criterion variable used are profit margin and return on equity. The study adopted an ex-post facto research design. Secondary data were employed in the study on the population of listed automobiles on the stock exchange in Pakistan. The data were obtained from the annual report of eleven (11) automobile assemblers from 2010 to 2016 year. The analyses of data were done through the use of descriptive statistics ANOVA and regression. The finding indicated a positive significant association among board size audit committee board meeting and chief executive officer duality with return on equity and profit margin however negative significant relation was observed among corporate governance mechanism and firm performance measure used. The study concluded that corporate governance influence firm performance in automobile assembler in Pakistan

Babatunde et al. (2017) investigated corporate governance, bank performance and bank crisis in Nigeria. The specific objectives of the study were to determine the relationship between board size and board composition on profit after tax. The dimensions of corporate governance measures used are board size and board composition, while bank performance was proxy with profit after tax. The theory used in the study was stakeholder theory, stewardship theory, and agency theory. The research design adopted was descriptive. The study used secondary and primary data for the analysis. The secondary data were collected from the financial report of five (5) banks from 2005 to 2015 as well as primary data. The data were analysed using regression analysis and chi-square. The result showed that board composition negatively influences profit after tax. The study also discovered a positive association between board size and profit after tax, which entail an increase in board size would result in improvement in service delivery to the customer as well as performance. The study recommended that the board size of Nigerian banks should not be too large; likewise, awareness of adherence to the code of corporate governance should be made.

Delima and Rasel (2017) investigated the impact of corporate governance on organisational performance in Batticola. The specific objectives of the study were to determine the influence of board size on corporate performance. The dimension of corporate governance variables is board size, corporate governance mechanism, communication strategies and code of conduct. The referent of organisational performance variables used includes customer satisfaction, employee commitment and corporate reputation. The methodology used was a survey research design. Primary data were used for the study. The study population consisted of 59 financial institutions. The instrument for data collection was a questionnaire. The questionnaires were served on 115 customers and 115 management of all the 59 financial institutions in Battiicola district with 5 Likert scales. The collected data were analysed using descriptive statistic correlation and multiple regressions. The finding shows a strong positive association between corporate governance mechanisms, communication strategies and organisational performance. The study

also discovered a positive moderate relationship between code of conduct and organisational performance while a weak negative non-significant relationship was observed between board sizes and organisational performance. The study conclude that there was a strong positive relationship between corporate governance and the organisational, performance of the financial situation in the Batticaloa district. The study recommended that the board of directors should concentrate on their role in other to increase organisational performance.

James (2017) conducted a study on the effect of corporate governance on financial performance in Kenya. The specific objectives of the study were to determine the relationship between board size and board diversity on return on assets and firm size. The referent used for corporate governance variables is board size, board structure, board diversity, chief executive officer duality and audit committee size whereas the proxies for financial performance used returned on asset and firm size was used for the control variable. The theories used in the study were agency stakeholder, stewardship theory and resources dependency theory. The study adopted a descriptive research design and the population of the study was made up of lager-tier deposit saving and credit cooperative societies in Kenya. Secondary data was used for the study, which was obtained from the annual financial report of selected saving and credit cooperative societies for the period 2012 to 2016. The analysis of data was done by the use of descriptive and inferential statistics, multiple regression and correlation analysis. The finding showed a significant negative relation between board size, chief executive officer duality and financial performance. Board structure and board diversity indicated a positive insignificant association with firm performance while audit committee size had a negative insignificant association with financial performance. The study concluded that board size significantly influences firm performance in Kenya. The study recommends that managers of saving and credit cooperative societies should endeavour to ensure adequate numbers are on the board of the cooperation including independent directors.
Nhung and Thuy (2017) conducted a study on the impacts of corporate governance on firm performance in Singapore. The specific objectives of the study were to determine the influence of board composition on return on asset and return on equity. The proxies of the independent variable used are board structure, board composition and chief executive officer and chairman duality whereas the return on asset, return on equity and Tobin Q's were the dependent variable proxies and firm size as control variables. The study anchored on Agency and stewardship theory. The quantitative research approach was adopted for the study. The population of the study consists of the industrial and services active Singaporean companies listed on the stock exchange. The secondary data method was used. The data were obtained from annual reports and accounts of one hundred and thirty-seven (137) firms in the Singapore stock exchange from 2013 to 2016 and the sand P capital I Q database. The data were analyzed using descriptive statistics, pairwise correlation and regression analysis. The result of the analysis indicated an inverse relationship between board size, and firm performance whereas no significant relationship was observed among board dependence, chief executive officer duality and company financial performance.
Palaniappan (2017) studied determinants of corporate financial performance relating to board characteristics of corporate governance in India. The specific objectives of the study were to determine the influence of board size and board independence on return on asset and return on equity. The referent of corporate governance characteristics used were board size, board

independence, board meeting and chief executive duality whereas the dimensions of firm financial performance used are return on equity, return on asset and Tobin Q. The study used secondary data, which was collected from two hundred and seventy five (275) out of three thousand two hundred and thirty (3,230) listed manufacturing firms in India for 2011 to 2015 financial year. The method of data analysis adopted was multiple regression and correlation. The empirical finding revealed that board size has a negative significant association with return on asset, Tobin's Q and return on equity. It was discovered that board meetings and board independence significantly influence return on assets and return on equity positively. The study concluded that board characteristics impact strongly firm performance in listed manufacturing firms in India. It was recommended that corporations should promote corporate measures
Akbar et al. (2016) investigated more on the relationship between corporate governance and firm performance in the United Kingdom. The study used a robust Generalised method of moment (GMM) specification that accounts for potential endogeneity problems that may have influenced the result of existing studies. The study used secondary data of listed companies on the London stock exchange for the 1999 to 2009 period, a sample of 435 companies was used. The data collected were analysed using descriptive statistics, and ordinary least square regression. The finding showed compliance with corporate governance regulation does not influence performance in the listed firm in the United Kingdom. The study discovered that the corporate governance index had a positive and significant relationship with return on asset and insignificant with Tobin's Q.

Kalu (2016) investigated the corporate governance and profitability of listed food and beverage firms in Nigeria. The specific objectives of the study were to ascertain the relationship between board size, board composition board skill and competence and board gender diversity on return on asset. The proxies used for corporate governance were board size, board composition, board skill and competence and board gender diversity while proxies for profitability were return on equity and net asset per share. The study used agency theory, shareholder value theory, stewardship theory, stakeholder theory, resources dependency theory, political theory and value synergy approach. The research design adopted was descriptive. The study employed the secondary source of gathering to collect data from the annual report of selected companies. The statistical tools employed were descriptive statistics (mean, median and standard deviation) and inferential statistics (skewness and kurtosis). The analysis of formulated hypotheses was done using ordinary least square multiple regression with secondary data obtained from eight (8) out of 23 companies quoted in the Nigeria stock exchange using random sampling techniques within the time frame of 2004 to 2014. The result of the finding showed that board size and board gender diversity have a positive association with return on equity and net asset per share whereas board composition and board skills and competence negatively relate to return on equity and net assets per share. The study concluded that the adoption of good corporate governance practices enhances transparency, ensures accountability, improves risk management as well as aligns shareholders' interests with that of managers and opens the way for corporate success. The study, therefore, recommended that Nigerian food and beverage companies should adopt effective corporate governance practices as a panacea for enterprise growth and survival.
Muhammad (2016) investigated corporate governance on a firm's financial performance in USA and Pakistan through a comparative study. The specific objectives of the study were to ascertain the influence of board size and board independence on return on asset and return on equity. The independent variable measures used include board ownership, size, effectiveness and structure,

chief executive officer duality, independent board, and board education and experience, likewise, the proxies for the dependent variable were return on asset and return on equity. The study focused on agency theory. The study adopted both primary and secondary data. The population comprised all listed firms on the stock exchange Pakistan and the New York stock exchange in the USA. The data were obtained from a sample of thirty (30) listed firms in both countries using structure questionnaires which were physically distributed to Pakistan firms and floated online to the USA-selected firm. Data related to financial performance were downloaded from annual reports of selected firms in both countries for the period 2010 to 2015. The data were analysed using descriptive statistics aided by Excel, The result revealed a significant positive association among board education and experience, board ownership, board effectiveness and chief executive officer duality with the performance of the firm whereas a negative significant correlation exists between board size and firm performance, likewise, no relationship was found between firm performance and director independence. It was discovered from the study that codes of corporate governance are been followed in both countries but it was better in developed countries.

Azeez (2015) conducted a study to evaluate corporate governance and firm performance in Sri Lanka. The specific objectives of the study were to determine the influence of board size and non-executive directors on return on asset and return on equity. The referent of the independent variable used were board size, non-executive director and chief executive officer duality while the proxies of the criterion variable used were return on asset, earning per share and return on equity. The control variables used are firm age, firm size and leverage. The study used a descriptive research design. Secondary data was used for the study and the population consisted of all listed companies in Colombia's stock exchange except the banking and finance sector. Data were obtained from the annual financial statement of hundred (100) firms listed on the stock exchange of Colombo from 2010 to 2012. The methods of analysis were descriptive statistics, Pearson’s correlation and regression analysis. The result of the empirical analysis showed a significant negative association between board size and the performance of the firm which indicates that improve financial performance favours small board size; likewise, positive significant relationships exist between the chief executive officer and chairman with firm performance. However, no significant association existed between firm performance and non-executive directors on the board.

Dabor et al. (2015) investigated the impact of corporate governance on firms’ performance in Nigerian. The specific objectives of the study were to determine the relationship between board gender diversity and board size on return on asset and return on equity. The corporate governance dimension used includes board gender diversity, ownership structure, board size and board independence, whereas measures of performance use return on assets and return on equity. The study was anchored on stewardship theory, agency theory and stakeholder theory. The study adopted a panel data regression methodology. Secondary sources of data were used for the study. The data were collected from the annual report of selected companies listed on the Nigeria stock exchange from 2004 to 2013. The statistical tools used for the analysis were descriptive statistics, correlational analysis and regression analysis. The result of the study showed that board gender diversity had a significant relationship with firm performance; large board size had a significant negative association with performance while ownership structure does not have any relationship with performance. The study concludes that corporate governance impact on firm performance.

It was recommended that statutory and regulatory bodies should ensure that listed companies maintain small boards.

Mugisha et al. (2015), carried out a study on the effect of corporate governance on the financial performance of banks in Rwanda. The research design adopted was descriptive research design, primary data was used in the study and the instrument for data collection was a questionnaire. The study population consisted of one hundred and twenty (120) senior managers of commercial banks in Rwanda. The sample size of ninety-two (92) out of which seventy-six (76) respond to the questionnaire using a five-Likert scale and was used for the analysis. The method of data analysis used was the regression technique. The finding revealed an insignificant association between institutional ownership, board composition and board independence with financial performance. It was concluded that corporate governance measures do not influence commercial bank financial performance in Rwanda. It was recommended that Rwanda's commercial bank regulatory body should provide a guideline on corporate governance practices to improve performance.

Adekunle and Aghedo (2014) investigated the corporate governance and financial performance of quoted companies in Nigeria. The specific objectives of the study were to determine the influence of board size and board composition on return on asset and profit margin. The dimensions used for the independent variable (corporate governance) were composition of board members, board size, and chief executive officer status and ownership concentration while the proxies for the dependent variable (financial performance) were Return on Asset and profit margin. The theory on which the study was anchored was stakeholder theory. The research design adopted in the study was a cross-sectional research design; the data type used was secondary data, which was sourced from annual reports of selected companies. The statistical tools employed in the study were descriptive statistics such as mean, median and standard deviation. The analysis of formulated hypotheses was done using ordinary least square regression and descriptive statistics on secondary data collected from 143 selected manufacturing companies' financial statements in Nigeria for the period 2011 aided by economic view software (E-view 7.0) and statistical package for social sciences version 20.0. The finding depicted a significant positive relationship between board size, chief executive officer status and composition of board members with firm performances whereas an insignificant negative association was noticed between ownership concentration and return on asset and an insignificant positive relationship with profit margin. The study recommended board members' composition majority be independent, likewise, the chief executive officer be separated from the board chairman in other to promote integrity, accountability and honesty for good corporate governance and that the board size should be in line with the size and activities of the corporation.

Akdogan and Boyacioglu (2014) evaluate the effect of corporate governance on firm performance in Turkey using board size, board of directors independence, firm size and firm age as the predictor variable whereas the return on asset and return on equity as the dependent variable while the control variable used was leverage ratio. The theory used in the study was the Agency theory. The descriptive statistical methodology was adopted. The secondary data was used in the study. The data were randomly collected from the annual report of the companies. The statistical tools used were descriptive statistics and multiple regression analysis. The analysis of data obtained from companies listed on the Istanbul stock exchange was done using multiple regression analysis. The finding showed that corporate governance rating grades

obtained by the company's shareholder and board of director criteria are lower compared to the other section. It also revealed a significant positive relationship between companies' application level of the corporate governance principles and return on asset as well as return on equity. The study concluded that the application level of corporate governance influences firm performance.

Gupta and Sharma (2014) conducted a study of the impact of corporate governance practices on firms' performance in Indian and South Korean companies. The proxies used for the predictor variable were board structure, different committees and disclosure whereas the criterion variable proxies used were return on asset and return on equity. Agency Theory was used for the study. The descriptive research design was adopted; the secondary source of data was employed which was gathered from annual financial reports from five (5) multinational companies in India and South Korea. The selection of these five companies was based on the international presence and the basis of turnover. The statistical tools used were descriptive statistics. The secondary data were collected from five companies each making ten companies quoted on the stock exchange of India and South Korea for a period of 2006 to 2013 and analysed using descriptive statistics such as mean and graph. The finding showed that India had more stringent corporate governance practices than South Korea. The study also revealed that there is little effect of corporate governance practice on both the share prices and companies' performance

Yasser and Denise (2012) investigated corporate governance and firm performance and value in Saudi Arabia. The specific objective of the study was to evaluate the influence of corporate governance on Tobin Q as well as return on assets. The corporate governance index was used as the independent variable while return on asset and Tobin's Q as the dependent variable. The cross-sectional research design was used. Secondary data was used for the study on a population of Saudi-listed firms. The data were obtained from fourteen (14) industries' annual reports from 2006 to 2009, the analysis of data was done using descriptive statistics and correlation analysis. The result of the finding showed that corporate governance had a significant positive relationship with firm performance. Ofurum and Torbira (2011) investigated corporate governance and firm performance in Nigeria. The specific objective of the study was to evaluate the influence of corporate governance on return on equity as well as return on asset. The proxies for the independent variable used were corporate governance score whereas the dimension of firm performance used are net profit margin, return on equity and dividend yield. The study used secondary data from ten (10) selected firms in Nigeria for a period of two thousand and four (2004) to two thousand and eight (2008). Panel data methodology was used for the study alongside time series and cross-sectional data. The analysis of data was carryout using linear regression. The finding showed a significant positive association between corporate governance and return on equity, dividend yield as well as net profit
margin. It was concluded that corporate governance influences firm performance. It was also recommended among others that board independence is needed to improve performance.

METHODOLOGY

The study used an ex-post facto research design which is a study after the facts had been known or an event had taken place. This is because it helps to identify things that need further investigation and it is not possible to manipulate the characteristics. Secondary data was in the study. The population of interest in this study constitutes all thirteen (13) industrial goods companies listed on the Nigerian stock exchange as of 31st December 2019. A sample size of eleven (11) companies representing about 85% (per cent) of listed industrial goods companies in Nigeria was obtained. The non-probability sampling technique adopted in this study was

convenience sampling which was based on the availability of financial data covering the period from 2009 to 2019. Two firms were excluded due to inadequate financial data covering the period of study. Finally, the study employed 121 data observations because 11 firms were selected for 11 years (2009-2019). The least-square multiple regression techniques and Pearson correlation coefficient aided by the statistical package for social sciences (SPSS) version 22.0 were used to measure the relationship between the independent variable and the dependent variable**.**

MODEL SPECIFICATION

To determine the influence of corporate governance on the financial performance of listed industrial goods companies in Nigeria, it is necessary to specify the appropriate model to be used .

F.P =$\beta0 + \beta1$ CG + et …. 1

NPM = $\beta0 + \beta1$ BOSE + $\beta2$ BOC + $\beta3$ BOMC + et……………………… 2

ROA= $\beta0 + \beta1$ BOSE + $\beta2$ BOC + $\beta3$ BOMC + et……………………...3

Where;

FP= financial performance variables (NPM, ROA,)

CG= corporate governance variable (BOSE, BOC, BOMC)

NPM= net profit margin

ROA= return on asset

BOSE= board size

BOC= Board composition

BOMC= board member competence

$\beta0$ = intercept

$\beta1 – \beta3$ = regression coefficient

et= error term

Table 1 Descriptive statistics on all the variable of the study

		NPM	ROA	BOSE	BOC	BOMC
N	Valid	121	121	121	121	121
	Missing	0	0	0	0	0
Mean		.094815	-.140718	.907859	60.4201	60.12132
Std. Deviation		.212662	1.733032	1.081288	69.6121	71.17285
Skewness		.360	-9.529	-.068	-.236	-.206
Kurtosis		3.652	7.135	-.506	-.485	-.297
Minimum		-.4912	-18.0425	.6990	37.5000	33.3300
Maximum		.8461	.7541	1.1139	77.7800	83.3300

Source: SPSS version 22 output, 2020

Table 1 Indicates the descriptive statistics on mean, standard deviation, skewness, kurtosis, minimum and maximum of all the variables of the study. The table showed 121 cases with no missing cases in all the variables. The mean of the data, which indicates the measures of central tendency, is displayed in the table for all variables. Likewise, the standard deviation which indicated the spread of the distribution as a measure of dispersion is also displayed. To determine asymmetry in distribution, skewness is computed, from table 4:2:2, none of the skewness values

is above one (1) meaning that the data assumes a normal distribution. The kurtosis showed positive and negative values, the kurtosis values that are greater than three indicate leptokurtosis (NPM, ROA,) while the kurtosis that is less than three (3) indicates platykortic distribution (BOSE, BOC, BOMC,). The minimum and maximum values of the entire variable are indicated in the table above.

Table: 2. correlation analysis on corporate governance attributes and financial performance.

Correlations

		CG	FP
CG	Pearson Correlation	1	.226*
	Sig. (2-tailed)		.025
	N	121	121
FP	Pearson Correlation	.226*	1
	Sig. (2-tailed)	.025	
	N	121	121

*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS version 22 output 2020

Table 2 depicted a positive correlation coefficient of .226* significant at .025< 0.05 level of significance. This value indicates a weak relationship between corporate governance attributes and financial performance. The positive correlation coefficient observed highlights that an increase in financial performance is associated with an increase in corporate governance attributes. Therefore the researcher concludes that there is a significant association between corporate governance attributes and the financial performance of listed industrial goods companies in Nigeria

Table 3 summarizes regression analysis on corporate governance attributes and financial performance.

Variables	Co ef	t-calc	t-table (0.05,121)	Sig. T	R	R^2	Durbin Watson	f-calc	f-table (0.05,1,119)	Sig f
Constant	0.447	2.126	1.980	0.001	0.226	0.051	2.063	4.759	3.890	0.025
CG	0.226	2.287		0.025						

Dependent variable: financial performance

Source: SPSS 22 output, 2020

FP= f {CG}………….. 1

FP= B_0-B_1 CG + et

FP= 0.447+0.226 CG

T-values in bracket (2.126) (2.287)

Table 3 shows the regression analysis on corporate governance attributes and financial performance. The table depicted a Pearson correlation coefficient of 0.226 indicating weak relations between corporate governance attributes and financial performance. The coefficient of determination (R2)= 0.051, implies that 5.1% variation of financial performance is explained by

changes in corporate governance attributes while 94.9% left is attributed to other variables that are not part of the model.

The value of f calculated of 4.759 had a significant f-value of 0.025; as such it is necessary to conclude that the model was useful. Conventionally, the f-calculated value of 4.759>f-table (0.05, 1, 119) =3.890, likewise the Durbin Watson statistic in the same table show 2.063. Therefore the researcher concluded and upheld the usefulness of the model.

Table 3 shows that corporate governance attributes had a t-calculated value of |2.287|>t-table (0.05, 121) =1.980 and a corresponding significant profitability value of 0.025<0.05 level of significance. The regression equation indicates that a unit increase in financial performance is associated with 0.226 increases in corporate governance attributes. Accordingly, the researcher concludes that corporate governance attributes significantly influence the financial performance of listed industrial goods companies in Nigeria. **Table 4** summarizes regression statistics indicating the influence of board size (BOSE), board composition (BOC) and board member competence (BOMC) on net profit margin.

Dependent variable: net profit margin (NPM)

Variable	Coef	t-calc	t-table (0.05, 121)	Sig. T	R	R^2	Durbin Watson	F-calc	f-table (0.05, 4,11)	Sig. F
Constant	.134	2.085		0.005						
BOSE	.202	2.180		0.039						
BOC	.293	3.235		0.002						
			1.980		.418	.175	2.051	6.210	2.650	.003
BOMC	.268	3.044		0.003						

Source: SPSS version 22 output, 2020

NPM= F (BOSE, BOC, BOMC)

NPM= B_O+B_1 BOSE+B_2 BOC+B_3 BOMC + et…………………2

NPM=.134+.202 BOSE+.293 BOC +.268 BOMC…..3

T-values in bracket (2.085) (2.180) (3.235) (3.044)

From Table 4 it was observed that Pearson correlation coefficient of 0.418 indicated a moderate relationship between the regressors and net profit margin. The coefficient of determination r2 = 0.175, implying that a 17.5% variation in Net profit margin is described by changes in the regressors while an 82.5% variation in net profit margin is described by factors other than those used in the model. The F. calculated value of |6.210| had a corresponding probability value of 0.003<0.05 level of significance; as a result, the usefulness of the model was upheld by the researcher. Likewise from the same table 4 the F-calculated value of |6.210| >
F-table (0.05,4,117) = 2.650, and also the Durbin Watson statistics in the same table showed 2.051 which indicates the absence of autocorrelation, therefore the utility of the model was upheld by the researcher.

Board size (BOSE) had a t-calculated value of |2.180|>t-table (0.05, 121) = 1.980 and a significant probability value of 0.039<0.05 level of significance. Therefore the researcher concludes that board size (BOSE) significantly influences the Net profit margin of listed industrial goods companies in Nigeria.

Board composition (BOC) had a t-calculated value of |3.235|>t-table (0.05, 121) = 1.980 with a significant probability value of 0.002<0.05 level of significance as such the researcher concluded

that board composition significantly influences net profit margin of listed industrial goods companies in Nigeria.

Board members competence (BOMC) had calculated t-value of |3.044|> t-table (0.05, 121) = 1.980 with an important probability value of 0.003<0.05 level of significance. Hence the researcher affirms that board member competence influences net profit margin of listed industrial goods companies in Nigeria.

Table 5 summarize regression statistics indicating the relationship of board size (BOSE), board composition (BOC), and board member competence (BOMC) on return on asset.

Variable	Coef	t-calc	t -table (0.05, 121)	Sig. T	R	R^2	Durbin Watson	F-calc	F-table (0.05, 4,117)	Sig. F
Constant	.195	2.280		.002						
BOSE	.272	3.850		.034						
BOC	.350	2.541		.038						
			1.980		.328	.108	2.080	3.591	2.650	.008
BOMC	.401	2.497		.040						

Dependent variable: Return on asset (ROA)

Source: SPSS version 22 output 2020

ROA= F (BOSE, BOC, BOMC) ……………………………………………1

ROA= B_0+B_1 BOSE+B_2 BOC+B_3 BOMC + et.……………………….2

ROA=0.195+.272 BOSE+.350 BOC+.401 BOMC…………3

T-value in bracket (2.280) (3.850) (2.541) (2.497)

Table 5 showed a Pearson correlation coefficient of 0.328. This correlation coefficient is low indicating a weak relationship between the regressors and return on assets. The coefficient of determination (r2) = 0.108, meaning that 10.8% variation in return on asset is explained by the variability of the regressors, while 89.2% variation in return on asset is explained by other factors not used in the model. The F-statistic (calculated) value of 3.591 and probability value of 0.008 shows the significance of the model which means that the predictor variable can predict variation in the criterion variables. Also from the same table 5 F- the calculated value of 3.591>F-table (0.05,4,117) = 2.650, likewise the Durbin Watson statistic showed 2.080 indicating the absence of auto-correlation; therefore the researcher affirmed the usefulness of the model.

Board size (BOSE) had a calculated t-value of |3.850|>t-table (0.05, 121) = 1.980 and an important alpha value of 0.034<0.05 significant level. The investigator, therefore, affirmed that board size significantly impacts on return on assets of listed industrial goods companies in Nigeria.

Board composition (BOC) had a calculated t-value of |2.541|> t-table (0.05, 121) = 1.980 significant probability value of 0.038<0.05 level of significance. Therefore the researcher asset that board composition significantly influences the return on assets of listed industrial goods companies in Nigeria.

Board member's competence (BOMC) had a t-value calculated of |2.497|>t-table (0.05, 121) = 1.980 and a significant alpha level of 0.040<0.05 significant level. Therefore the researcher affirms that board members' competence (BOMC) significantly influences the Return on assets of listed industrial goods companies in Nigeria.

DISCUSSION OF FINDINGS

Several findings were made in the course of testing the hypothesis of the studies, therefore it is pertinent to discuss these findings and relate them to the literature review on corporate governance attributes and financial performance. There is a weak positive correlation of 0.226* significant at 0.025<0.05 level of significance on the relationship between corporate governance attributes and financial performance. The observed positive correlation coefficient indicates that an increase in financial performance is associated with an increase in corporate governance. Also, the regression analysis test showed the same correlation coefficient of 0.226* and a weak coefficient of determination of 0.051 in Table 2 which implies that a 5.1% variation in financial performance is explained by changes in corporate governance attributes. The relationship was significant at F = 0.025, likewise, corporate governance had a t-value of |2.287|>t-table (0.05, 121) =1.980 and a corresponding significant alpha value of 0.025<0.05 level of significance. The regression coefficient indicated that a unit increase in financial performance is associated with a 0.226 increase in corporate governance attributes. Accordingly, the researcher concludes that corporate governance attributes significantly relate to the financial performance of listed industrial goods companies in Nigeria. This finding agrees with the work of Delima *et al* (2017), James (2017), Yasser *et al* (2012), Ofurum *et al* (2011) etc. that observed a positive relationship between corporate governance attributes and financial performance in the organisation under study. However the finding was at variance with the finding of Nhung *et al,* (2017), Goel (2018), Balagobei (2018), Azeez (2015), Dabor *et al* (2015) etc. that discovered a negative significant relationship between corporate governance and financial performance, Also the work fails to agree with Ahmed (2019), Mugisha et al (2015), Gupta et al (2014), Akdogam et al (2014) etc. who did not observe any significant relationship between corporate governance attributes and financial performance in the corporation under investigation. The finding is consistent with stakeholder theory that supports a large board size that will accommodate all interest groups.

Board size and net profit margin

The test of hypothesis 1 depicted that board size had a positive significant relationship with net profit margin. This was discovered in Table 4 which exhibited that board size had a regression coefficient of 0.202 which implies that a 0.202 increase in board size is associated with a unit increase in net profit margin. Likewise, the test showed a t-value of |2.180|>t-table (0.05, 121) = 1.980 and an important probability value of 0.039<0.05 significant level. Hence the researcher affirms that board size relates to the net profit margin of listed industrial goods companies in Nigeria significantly. The finding conformed with the finding of Velnampy (2018), Babatunde *et al* (2017), Agbaeze *et al* (2018) Babor *et al* (2017)etc. who discovered a positive relationship between board size and net profit margin in the firm under study. On the other hand, the finding disagrees with the work of Yameen et al (2019), Yilmaz (2018), Mohammad (2016) Olayiwola *et al* (2018) etc. which conclude negative relationship between board size and net profit margin in the industries under investigation. The finding is consistent with stakeholder theory.

Board composition and net profit margin

The test of hypothesis 2, showed that board composition relates to net profit margin significantly. This was observed in Table 4 which presents that board composition had a regression coefficient of 0.293 indicating that an increase in non-executive board composition is associated with an increase in net profit margin. The analysis further pointed out that board composition had a t-value of |3.235|>t-table (0.05, 121) = 1.980 and a corresponding probability value of 0.002<0.05

level of significance. As a result, the investigator deduced that board composition significantly relates to the net profit margin of listed industrial goods companies in Nigeria. The discovery was in agreement with Yameen *et al* (2019) Velnampy (2018), Yasser *et al* (2012) Adekunle (2014), and Olayiwola *et al* (2018) that ascertained a significant positive connection between board compositions and net profit margin of listed industrial goods companies in Nigeria in the industries under study. The finding is inconsistent with stakeholder theory.

Board member's competence and net profit margin

The test of hypothesis 3 showed that board members' competence significantly relates to net profit margin. This was demonstrated in Table 4 which revealed that board members' competence had a regression coefficient of .268 which indicates that .268 increases in board members' competence is associated with a unit increase in net profit margin. The table also informed that board members' competence had a t-value of |3.044|>t-table (0.05, 121) = 1.980 and a significant probability value of 0.003< 0.05 level of significance, thus the researcher conclude that board members' competence had a significant relationship with a net profit margin of listed industrial goods companies in Nigeria. This finding is in harmony with Kamau, (2018) who discovered a positive relationship however; the work disagrees with the finding of Kalu, (2016) who discover a negative relationship between board skill and financial performance in the industries under investigation.

Board size and return on asset

The test of hypothesis 4 depicted that there exists a significant association between board size and return on asset. This is evidenced by Table 5 reveals that board size had a regression coefficient of .272 this implies that .272 increases in board size are associated with a unit improvement in financial performance. Likewise, board size had a t-value of |3.850| > t-table (0.05, 121) = 1.980 and a significant probability value of 0.034 < 0.05 level of significance. Hence the researcher affirms that board size had a significant relationship with the return on assets of listed industrial goods companies of Nigeria. The result of the finding aligned with Aktan *et al* (2018), Reska (2018), Sathyamourthi *et al* (2017), Baber et al (2017), Awkan *et al* (2016), who discover a positive relationship with the tested variable within the industries study. On the contrary, the work disagrees with that of Gideon *et al* (2019), Essia *et al* (2019), and Palamappan (2017), etc. who discovered a negative relationship between the variables studied.

Board composition and return on asset

The test of hypothesis 5 clearly stated that there exists a significant relationship between board composition and return on assets. This was observed in Table 5 which exhibited that board composition had a regression coefficient of .350 this means that .350 increases in board composition are related to an increase in return on assets. Also, board composition had a t-calculated value of |2.541|>t-table (0.05, 121) = 1.980 and a significant probability value of 0.038 < 0.05 level of significance. Hence the researcher affirms that board composition had a significant relationship with the return on assets of listed industrial goods companies in Nigeria. This is in line with the findings of Joshua *et al* (2019), Sathyamourthi *et al* (2017), Ashraf *et al* (2017) etc. which proved a significant positive relationship between board composition and return on asset of the firm studied whereas the finding opposed to the work of Eissa *et al* (2019), Dosunmu *et al* (2018) etc. This discovered a significant negative association between board composition and return on assets in the firm where the investigation was carried out.

Board member's competence and return on asset

The test of hypothesis 6 revealed that board members' competence significantly influences the return on assets. This was discovered from Table 5, which demonstrated that board members' competence had a regression coefficient of.401 This denotes that .401 increases in board members' competence are associated with a unit increase in return on assets. Likewise, board member competence had a t-value of |2.497|>t-table (0.05, 121) = 1.980 and a corresponding alpha value of 0.040<0.05 level of significance. So, the researcher deduces that board members' competence had a significant relationship with the return on assets of listed industrial goods companies in Nigeria. The discovery conformed with that of Kamau (2018) who discovered a positive relationship between board skill and return on asset of the industries investigated.

CONCLUSION AND RECOMMENDATION

This study investigated the corporate governance attributes and financial performance of listed industrial goods companies in Nigeria. The essential feature of companies success lies in the corporate governance measures taken, therefore the adoption of good corporate governance rules will promote corporate governance transparency, accountability and improved corporation among stakeholders thereby enhancing the overall performance of the corporation. The finding of the study established a weak positive significant relationship between corporate governance and financial performance. Based on the empirical finding in the course of the study corporate governance attributes, and financial performance in listed industrial goods companies in Nigeria. The study recommends the following:

1. Corporate governance attributes have a direct relationship with financial performance. This indicates that the issue of corporate governance should be seriously encouraged as a key factor to improve financial performance thereby maximizing shareholder and stakeholder value. The external auditors should be mandated to issue certificates of compliance with the code of corporate governance for public companies as it is applicable in some countries like India, by regulators of the economy. Likewise, there is a need to develop an appraisal tool for regular monitoring of boards of directors as this will help create credibility in corporations in Nigeria.
2. Board size has a linear association with net profit margin; this implies that a large board size will increase the net profit of industrial goods companies in Nigeria. Hence more competent members should be appointed to the board.
3. The finding of the board composition (non-executive) indicates that an increase in the profit margin of listed industrial goods companies in Nigeria is associated with an increase in outside board members. Therefore competent outside directors with requisite experience should be appointed to the board at all times necessary.
4. The result of board members' competence in listed industrial goods companies in Nigeria suggests an increase in board members' competence to increase net profit margin. The percentage of members' competence on the board should be increased to improve profit.
5. The empirical study depicted that board size positively impacts on return on assets of listed industrial goods companies in Nigeria. This means that board size should be increased to boost the return on assets thereby encouraging efficient utilization of resources.
6. The study result indicates that board composition positively impacts on return on assets of listed industrial goods companies in Nigeria. Therefore the number of outside directors should be increased from the present number to improve return on assets, likewise, there

should be a review of the non-executive effectiveness process through board education improvement, adequate information and effective communication measures. Also, futures appointment should not be based on political influence or family ties.

7. The result of board members' competence positively influences the return on assets of listed industrial goods companies in Nigeria. This implies that any appointment to the board of a corporation should make competence an important factor to improve the performance of the entity.

REFERENCES

Adekunle, S.A & Aghedo, E. M (2014). Corporate governance and financial performance of selected quoted companies in Nigeria. *European Journal of Business and Management. 6* (9)53-60. https://www.iiste.org/2222-1905(paper)ISSN-2222-2839(online)

Ademola, O.J, Moses, O.I & Ucheagwu, C.J (2016). Corporate governance and financial performance of selected manufacturing companies in Nigeria. *International Journal of Advanced Research, Social and Management Sciences. 2*(10) 29-43. http://www.ijaar.org, ISSN:2488-9849

Agbaeze, E. K & Ogosi, C. D (2018). Corporate governance and profitability of Nigerian banks. *European Journal of scientific research, 148*(3), 358-367. https://www.europeanjournalofscientificresearch.com. ISSN1450-216x/1450-202x

Ahmed S.A (2019). Corporate governance and firm performance; Evidence from an emerging market. Risk governance and control financial market and institutions, 9 (1), 45-52. https://www.doi:10.22495/rgcv9i1P4

Ahmed, A & Durga, P.S (2019). Corporate governance and firm performance in the Saudi banking industry. Banks and bank systems, 14 (1), 147-158. https://www.dx.doi.org/10.21511/bbs.14(1).2019.13

Akdogan, Y, E & Boyacioglu, M A (2014). The effect of corporate governance on firm performance. A case of Turkey. *International journal of critical accounting*, 6(2), 187-210. https://www.doingbusiness.org

Aktan .B, Turen S, Tvaronavicine M. Celik S; & Alsadeh H.A (2018). Corporate governance and financial performance of the financial firms in Bahrain. *Polish Journal of Management Studies, 17* (1), 39-58. https://doi:10.17512/PJMS.2018.17.1.04

Apodore, K, & Zainol, S. S (2014). Determinants of corporate governance and corporate performance among consumer product industry in Malaysia; A theoretical model. *International journal of academic research in accounting, finance and management sciences, 4*(2), 159-162. https://dx.doi.org/10.6007/IJARAFMS/V4:i2/836

Arinze. N.(2013) Determinants factors for the success of corporate governance in an organization. *Singapore Journal of business economics and management studies. 1*(11)18-24. Https://www.doi:.1012816//000//3809

Ashraf .M, Bashir, A, & Agar. N (2017). Impact of corporate governance on firm's financial performance. Textile sector of Pakistan. *International Journal of Business and management invention, 6*(5),13-19. https://www.corpusID:201687704

Azzez . A.A (2015).Corporate governance and firm performance. Evidence from Sri Lanka. *Journal of Financial and Bank Management, 3* (1), 180-189. https://dx.doi.org/10.15640/JFBM.v3n1a16

Babar .A, Kanwal .G & Nawaz (2017). Corporate governance and firm performance. Automobile assemblers are listed on the Pakistan stock exchange. *Journal of Business Strategies, 11* (2), 125-140. https://dx.doi.org/10.1453/aabfj.v11il.6

Babatunde .A, Awoyemi, O.B; Aesuwa, R. & Akomolafe .J.K (2017). Corporate governance, banks performance and bank crisis in Nigeria. China –USA Business Review, 16 (4) 180-188. https://doi:10.175265/1537-1514/2017.04.003

Balgobei. S. (2018). Corporate governance and firm performance. Empirical evidence from Emerging market. Asian Economic and Financial Review, 8 (12), 1415-1421. https://www.aesweb.com/journals/5002/December2018

Bashir, U; Fatima U; Sohail, S; Rasul, F. & Melboob, R. (2018). Internal corporate governance and financial performance nexus; a case of banks of Pakistan. *Journal of Finance and Accounting, 6* (1), 11-17. https://doi:10.11648/j.jfa.20180601.12

Batunde, A.A & Akeju .J. B (2016). The impact of corporate governance on firms profitability in Nigeria. *International Journal of Business and management invention, 5* (8), 69-72. https://www.IJBMI.org//ISSN(online):2319-5028,ISSN(print)12139-80IX

Cortfield .A. (1998). The stakeholder theory and it's future in Australian corporate governance. A preliminary analysis. Board Law Review, 10 (2), 213-240. https://csab.wusti.edu/paper/manage/ceo9/coe9/.htmi

Dabor. A. O, Isiavwe. D. T, Ajagbe. M. A & Oke. A. O, (2015). Impact of corporate governance on firm's performance. *International Journal of Economics, Commerce and Management, 3*(6), 634-653. https://www.ijecm.co.uk/issn23480386

Delima, V.J & Rayel, V.R (2017). Impact of corporate governance on organizational performance. *International Journal of Engineering Research and General Science, 5(*5), 6-16. https://www.ijergg.org/issn2091-2730

Donaldson. T. & Preston, L. E (1995). The stakeholder theory of corporation's concept, evidence and implications. Academy of management review, 15(3), 369-381.

Dosunmu, A.I, Okey, O. & Alwell. N (2018). Corporate governance and banking sector performance in Nigeria. *Journal of Applied Economics and Business 6(*4), 35-50

Eissa, A, A; Faozi, A.A; Anwar, A; Mosab I.T (2019). Impact of corporate governance mechanism on the financial performance of hostel companies. Empirical evidence in India. *African Journal of Hospitality, Tourism and Leisure, 8* (2), 1-21. https://www.ajh+com

Fatihudin. D, Jusni, Mochklas. M, (2018). How to measure financial performance. *International journal of civil engineering and technology, 9*(6), 553-557. https://www.iaeme.com/ijciet/index.asp

Freeman. R. E (1984). Strategic management: A stakeholder approach. Boston: pitman.

Gideon, T,K, Odonayo; M..O, & Bamikole .S.F (2019). Corporate governance and financial performance. An empirical analysis of selected multinational firms in Nigeria. Problems and perspectives in management, 17 (1), 11 - 18. https://dx.doi.org//10.21511/ppm.17(1).2019-02

Goel. P (2018). Implications of corporate governance on financial performance; an analytical review of governance and social reporting reforms in India. *Asian Journal of Sustainability and Social Responsibility, 3(*4) 1-21

Gupta. P. & Sharma. A. M. (2014). A study of the impact of corporate governance practices on firm performance in India and South Korean companies. Procédai – social and

Behavioural Science, 13(3), 4-11. https://creativecommons.org/licenses/by-nc-nd/3.01.doi:10.1016/j.sbspro.2014.04.163

James, O.O (2017). The effects of corporate governance on the financial performance of larger tier saving and credit cooperative societies in Kenya. *A dissertation submitted to the University of Nairobi for the award of Master of Science.*

Joshua, U. M, Effiong. E. J. & Imong. N. R (2019). Effect of corporate governance on the financial performance of listed deposit money Banks in Nigeria. *Global Journal of Social Sciences, 18*(1), 107-118. https://doi:10:4341/9jssv18i1.9

Kalu. N. N, (2016). Corporate governance and profitability of listed food and beverages firms in Nigeria. Industrial engineering letters, 6(3), 47-105. https://www.Iiste//.org

Kamav .G. (2018). Corporate governance and performance of financial institutions in Kenya. Academy of Strategic Management Journal, 17(1), 1-13. https://doi:1939-6104-17-1-167

Monika, G & Guarav. N. (2015). Impact of corporate governance on the profitability of a firm. An empirical study on the National stock exchange. Second International Conference On Science, Technology and Management 572-578. Https://www.conferenceworld.in.www.icsstndu.com

Mugisha .S. X. Jaya. S. Joseph. O. & Mbabazi. M (2015). Effect of corporate governance on the financial performance of the banking industry in Rwanda. A case study. A commercial bank in Rwanda. *International Journal of Small Business and Entrepreneurship Research, 3*(6), 29-43. www.eajournals.org.ISSN2053-5821

Muhammad.A (2016). Impact of corporate governance on firms financial performance; A corporative study of the developed and non-developed market. *Arabian Journal of Business and Management Review, 6* (6), 1-6. https://doi:10.4172/2223-5833.1000272 .

Naz. F, Ijaz. F. & Naqvi. F. (2016). Financial performance of firms. Evidence from Pakistan cement industry. *Journal of Teaching and Education, 5*(1), 81-94. https://corpusID:168626841

Nhung H.V & Thuy .N (2017). Impact of corporate governance on firm performance. An empirical study of listed Singaporean companies, dissertation submitted to the school of economics and management, Lund University.

Ofurum, C.O & Torbira, L.L (2011). Corporate governance and firm performance in Nigeria. IJEMR,1(4), 1-11. http://www.ExclusiveMBA.Com/Ijemr

Okoye, L.U, Evboomwan, G.O, Achugamonu, U & Araghan.I (2016). Impact of corporate governance on the profitability of the Nigerian banking sector. *Esut Journal of Accounting, 7*(1), 281-292. https://eprints.covenantuniversity.edu.ng/id/eprint/8197

Olayiwola. K.T. (2018). The effect of corporate governance on the financial performance of listed companies in Nigeria. *European Journal of Accounting, auditing and Finance Research, 6*(9), 85-98. https://www.eajournals.org/print.ISSN.2053-4086

Oyedokun, G.E, Sanyaolu, W.A & Bamigbade D, (2017). Corporate governance and financial performance of listed manufacturing firms in Nigeria. Advances in management 16(2), 3-7.

Palamappan.G. (2017). Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry: An empirical study. *European Journal of Management and Business Economics, 26*(1),67-85. https://dx.doi.org/10.1108/EJMBE-07-2017-005

Pandey, S. & Ansani . V.A (2014). A theoretical framework for corporate governance. *Indian Journal of Corporate Governance. 7 (1),* 56-72. https://doi.org/10.1177/0974686220140104

Rakha, H(2018). Does corporate governance affect financial performance? A study of selected Indian banks. *Asian Economic and financial review, 8* (4), 478-486. https://www.aessweb.com/,journals/5002/April2018

Sathyamourthi, C.R, Baliyain, P, Dzimiri, M, & Wally-Dima L. (2017). The impact of corporate governance on financial performance. The case of listed companies in the consumer services sector in Botswana. *Advances in Social Science Research Journal, 4*(22) 63,-77. https://doi.org/10.14738/assrj.422.3925

Stephen, A. E, & Benjamin, U.E (2013). Corporate governance issues and its implementation; The Nigerian experience. *Journal of Research in international business management, 3*(2), 53-57. https://www.interesjournals.org/JRIBM

Velmanpy T, & Anandasayanan S, (2018). Corporate governance and corporate profitability of listed diversified holding companies in Sri Lanka. *International Journal of Accounting and Financial Reporting, 8*(1), 294-304. https://doi.org/10.5296/ijafr.v8il.12486

Yameen, M, Farthan, N.H & Tabash, M.I, (2019). The impact of corporate governance practices on firm's performance: An empirical evidence from the Indian tourism sector. *Journal of Institutional*
Studies, 12 (1), 208-228. https://doi:10.14254/2071-8330.2019/12-1/14

Yaser, F. & Denise .D (2012). Corporate governance and firm performance and value in Saudi Arabia. *African Journal of Business Management, 6* (36), 10025-10034. https://doi.10.5897/AJBM12.008

Yilmaz. I. (2018). Corporate governance and financial performance relationship: the case for Oman companies. *Journal of Accounting, finance and auditing studies, 4*(4), 84-106. https://doi:10.32602/jafas.2018.006