

**IMPACT OF OWNERSHIP STRUCTURE ON REPORTED EARNINGS QUALITY OF
LISTED CONSUMER GOODS FIRMS IN NIGERIA**

BY

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE
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DECLARATION

I hereby declare that this dissertation has been written by me and it is a report of my research work. It has not been presented in any previous application for the award of degree. All quotations are indicated and sources of information specifically acknowledged by means of references.

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DATE

CERTIFICATION

This dissertation entitled “Impact of Ownership Structure on Reported Earnings Quality of listed Consumer Goods Firms in Nigeria” meets the regulations governing the award of the Degree of Master of Science (M.Sc.) in Accounting of Nasarawa State University Keffi, and is therefore approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to Allah (SWT), the Most Beneficent, Most Merciful, the Wise, the Source of all good things, the Latent and the Everlasting; for his Compassion and Mercy on me. I will forever be grateful

To the memory of my late Father Isa Mamman may his soul rest in perfect peace, Amin.

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ABSTRACT

This study investigated the impact of ownership structure on reported earnings quality of listed consumer goods firms in Nigeria. The study covered the period of ten years from 2008 to 2017. The study used Expost-facto research design. The total number of listed consumer's goods firms as at 31st December, 2017 were twenty-three (23) out of which a sample of fifteen (15) was used for the study. Secondary data from annual reports and accounts were employed. Multiple regression was adopted as a technique of analysis. The results revealed that managerial ownership has a negative insignificant impact on reported earnings quality. The study also revealed that institutional ownership and ownership concentration have a positive significant impact on reported earnings quality. While family ownership has a positive insignificant impact on reported earnings quality. Based on these findings, the study recommends among others that institutional shareholding should be encouraged by monitoring authorities such as Security and Exchange Commission (SEC) because of the role the plays in restraining managers to act in a manner that favors the firm.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Earning is one of the most essential items in financial statement. This is because, most users of financial statement mostly emphasis on the company's earnings before looking at other variables. Earnings indicate the extent to which a company has engaged in value added activities. Therefore, increase in earnings represents an increase in company's value, while decrease in earnings signals a decrease in value (Lev, 1989). However, from accounting point of view, earning is the final product of the entire accounting process. Since accounting deals with measurement and communication of economic information that involves the determination of net income (accounting earnings). Accounting's earnings serve as a major component of corporate information required in the capital market for assessing firm performance and for stock valuation (Musa, Ibikunle & Oba 2013). Therefore, accounting earnings information need to be more reliable. This is because, the integrity of financial reports depends on the reliability of earnings being reported by firms; and the capital market needs precise and unbiased financial reporting to value securities and revive investors' confidence (Roodposhti & Chasmi 2011).

Earnings quality indicates the extent to which investors can predict the future earnings of a firm. Financial reports are designed to provide relevant information for all users of accounting information, including investors. Investors use earnings information to analyse a particular firm's current performance and estimate its future prospects. Earnings numbers are viewed as of high quality when they enable investors to better estimate a firm's future prospects (Hussainey, 2009). Moreover, the importance of the predictive nature of accounting earnings is manifested when

taking into consideration, for instance, the use of accounting earnings in evaluating a firm's equity, which requires investors to anticipate the firm's expected future cash flows.

Though, prior research assign ownership structures a very influential role within the governance structure. Ownership structure is a subset of corporate governance that relates to the nature of ownership of the equity shareholding of a firm. Who acquires the firm's equity shares and to what extent is the interest can either align with or entrench the minority shareholder's objective of value maximization. Beyer, Czarnitzki and Kraft, (2011). documented that managerial ownership impact firm performance. Similarly, managerial ownership has been identified to have an impact on earnings quality (Klein, 2002; Warfield, Wild & Wild, 1995). The need for an effective ownership structure arises because of the separation of firm's ownership from its control that is made even more complex by the level of growth and size of today businesses. This, theoretically, necessitates the managers to act in such a manner that is consistent with owner's interest. However, this is not always the case as managers tempt to use their position to pursue their own personal interest at the expense of the shareholders. Thus leading to agency conflict.

Institutional shareholding has been a central issue in the empirical discussions on the interaction between corporate governance and earnings quality. Perhaps, the predominant view is that institutions have the required resources and financial expertise to monitor and discipline managers and thereby reducing agency problems. In this light, Beasley (1996) observed that as institutional investment increases, financial fraud decreases in U.S. firms.

Studies on the association between ownership concentration and earnings quality has also documented contradictory results. Two conflicting arguments seem to dominate these discussions. Some researchers are of the opinion that large shareholding by few individuals

induce them to monitor and discipline managers, because the cost implication of their monitoring is less than the expected benefit from their huge investments (Klein, 2002). On the contrary, it has also been documented that concentrated equity ownership in the hands of few investors can lead to abuse of power by the lion shareholders as they have the tendency to align with managers to expropriate minority shareholders' wealth (Farooq & Eljai, 2012).

As noted by Mak and Kusnadi (2005), the impact of family ownership is critical to the effectiveness of corporate control employed by firms. Family ownership may either improve or temper with the value growth objective of the corporation because of the influence that the larger shareholders bring in. Prior studies indicate that family ownership provides incentives to reduce agency costs (Bartholomeusz & Tanewski 2006). In this light, Hashim and Devi (2008) also established a positive connection between family ownership and reported earnings quality. However, other studies also draw attention to the possibilities that concentrated ownership by family firms create agency costs. In this regard Klai and Omri (2011) perceive that the power of families reduces the quality of financial information.

The consumer goods sector of every country plays a vital role to the economic development of a country, consumer goods firm are mostly in to manufacturing and they deal with heavy assets, large volume of transactions and accruals. Managers can use this large transactions and accruals to hide accounting irregularities, misstatement and earnings management, which have adverse effect on reporting quality (Shehu, 2011, & Augustine, 2014). Therefore, the adverse consequence of poor quality report and the need to ensure quality financial report necessitated this study on earnings quality in Nigeria.

1.2 Statement of the Problem

The quality of accounting information is influenced by a group of elements, most of which stem from the demand for such information for use in contractual engagements and from the incentives and opportunities of management to manage the reported information. Managers to a greater degree are the ones trusted with the affairs of businesses whom in most cases have little or no equity interest in it. The real equity owners on the other hand have little or no direct day-to-day running of the firm. In that regard managers are vested with the duty of preparation and reporting of the earning numbers (profit) of the firm they managed. Consequently, these pave ways for manipulating the information content of the report to suit their interest.

The concern for the investigation into the practice of earnings manipulation through discretionary accruals becomes even more pertinent following the collapse of energy corporation (ENRON) in 2001. The company filed for bankruptcy after adjusting its accounts. WorldCom, Global Crossing and Rank Xerox are other companies in the USA with similar problems. In Italy, Parmalat failed in 2003 when it engaged in accounting scandals worth eight billion Euros (Demaki, 2011). This event has led to heated debate among regulators, practitioners and researchers to find a solution to the unprecedented corporate failures. The major underpinning factor for the accounting scandal is lack of good corporate governance structure that is capable of checking the excesses of managers. As such, new codes of best governance practices were introduced in the U.S. in 2002 by the Sarbanes-Oxley Act with an opinion to improve monitoring of managers and protect investors interests. Likewise, in Nigeria the code for best governance practices was introduced in 2003 which was subsequently reviewed in 2011. In spite of the various governance structure introduced by the Central Bank of Nigeria and Security and Exchange Commission in Nigeria, there are cases of corporate misconducts in

Cadbury Nigeria Plc, in 2009 which is one among the firms listed in consumer's good sector that raise fresh and legitimate concerns about the agent-principal relationship that exists between shareholders and managers.

More so, the relationship between ownership structure and earnings quality has been acknowledged with conflicting results in advanced nations. Such prior studies include: Hamdi, Narjess and Jean-Claude (2009), Bashir, Navid and Omid (2012) Redhwan and Ku (2013) Zobeideh and Makerani, (2013) Wafa and Boujelbène, (2014), Hafiza and Susela (2014) Jo-Lan and Ching-Chieh, (2015), Imad, (2015), Zhizhong and Qingmei (2016) Erivelto and Fernando, (2016); Janeth and Cosmas (2016) which are from advanced economies of the world have not arrived at a consensus on the impact of ownership structure on reported earnings quality. Even at that, generalization from those studies cannot be extended to Nigeria environment given the disparities in the nature of economies and level of sophistication of control mechanism in developed and developing nations of the world.

Many studies have been conducted on the relationship between ownership structure and earnings quality. For instance, Bawa and Isa (2014) examined the relationship between ownership structure and earnings quality of listed deposit money banks in Nigeria using earnings formativeness as proxy for earnings quality for period of 2006-2012. Salisu, Abubakar and Aliyu, (2016) studied the effect of institutional ownership and earnings quality of Quoted Food/Beverages and Tobacco Firms in Nigeria for duration of 2002-2014. However, their study focused on institutional ownership, as a proxy for ownership structure and ignored other ownership structure variables such as family ownership. Moreover, Waidi and Johnson (2016) studied the relationship between Corporate Ownership Structure and financial reporting quality using earnings quality element (accrual quality) as proxy of financial reporting quality among

Deposit Money Banks in Nigeria for the duration of 2005 to 2013 Likewise, Hajara (2016) examined the impact of ownership structure on earnings quality of listed insurance companies in Nigeria for the period of 2008 to 2013 using the performance adjusted discretionary accrual model as a proxy for earnings quality. However, the outcomes of their studies are obtained from samples drawn from different sectors mostly, from the financial sector. It is therefore not clear if their findings can be generalized across industries including consumer goods considering sectorial peculiarities.

There is also a methodological gap on the model used in segregating discretionary and non-discretionary accruals. Most of the studies on this aspect used models of discretionary accruals like Jones (1991), Modified Jones (1995), Dechow and Dechev (2002) among others. Although these models are being used in estimating residual values, they are deficient in not recognizing performance in the non-discretionary portion of accruals, which may influence total accrual, thereby leading to wrong conclusion (Kothari, Leone & Wasley; 2005). Therefore, this study covered the gap by using Kothari et al. (2005) performance adjusted discretionary accrual model. The model included return on assets (ROA) as a control for firm performance. The aim of ROA is to control for variations in accruals that result from changing business conditions and the resulting change in strategy and operating decisions rather than from earnings manipulation.

In summary, gaps in the literature exist in terms of omitted variables, period coverage and in some cases methodology of analysis in Nigeria. This study therefore represents an attempt to fill these gaps that have been identified.

1.3 Research Questions

In line with the identified gaps, the major question that this study seeks to answer is whether ownership structure impacted earnings quality of listed consumer goods firms in Nigeria. The specific questions raised to guide the study are:

- i. What is the impact of managerial ownership on reported earnings quality of listed consumer's goods firms in Nigeria?
- ii. How does institutional ownership impact earnings quality of listed consumer's goods firms in Nigeria?
- iii. What is the impact of ownership concentration on reported earnings quality of listed consumer's goods firms in Nigeria?
- iv. What is the impact of family ownership on reported earnings quality of listed consumer's goods firms in Nigeria?

1.4 Objectives of the Study

The main objective of this study is to examine the impact of ownership structure on reported earnings quality of consumer goods firms in Nigeria. The specific objectives are as follows:

- i. Examine the impact of managerial ownership on reported earnings quality of listed consumer's goods firms in Nigeria.
- ii. Examine the impact of institutional ownership on reported earnings quality of listed consumer's goods firms in Nigeria.
- iii. Assess the impact of ownership concentration on reported earnings quality of listed consumer's goods firms in Nigeria.
- iv. Examine the impact of family ownership on reported earnings quality of listed consumer's goods firms in Nigeria.

1.5 Statement of Hypotheses

In line with the objectives of the study, the following hypotheses are formulated:

H₀₁: Managerial ownership has no significant impact on reported earnings quality of listed consumer goods firms in Nigeria.

H₀₂: Institutional ownership has no significant impact on reported earnings quality of listed consumer goods firms in Nigeria.

H₀₃: Ownership concentration has no significant impact on reported earnings quality of listed consumer goods firms in Nigeria.

H₀₄: Family ownership has no significant impact on reported earnings quality of listed consumer goods firms in Nigeria.

1.6 Significance of the Study

Several stakeholders are likely to benefit from the outcome of this study.

Firstly, it will be of beneficial to shareholders, as earnings is one of the vital features that specifies the performance and direction of a company, but, with dishonest conduct managers incline to influenced reported earnings which does not translate into true activities of a firm, as such led to misallocation of fund. Therefore, the findings of this study will guide the shareholders on whether to continue to invest in companies or to sell their ownership stake.

Secondly, this study will serve as an essential planning tool for managers by assisting them to use the power of earnings in the public interest. It will also enable investors and potential investors to identify the earnings quality in earnings predictions and also assist in monitoring their wealth for optimal resource allocation. Furthermore, investors and shareholders of

consumer goods sector in particular will stand to benefit tremendously from the outcome of this research with information on how ownership structure impact on reported earnings quality.

Thirdly, the results of this study will be useful to shareholder of consumer's goods firms in deciding on their share formation, and whether their ownership structure really translate into intended result of effective monitoring of their manager's financial activities. As such each firm in the sector will know how best to issue their shareholdings.

Fourthly, the outcomes of this study is also expected to have specific positive effects for supervisory bodies who are responsible for guaranteeing high earnings quality such as Securities and Exchange Commission (SEC). In addition, the ideas and measures of earnings quality used in the study will provide a guide to market partakers on analysis of quality of earnings.

Lastly, the result will add to body of knowledge on the relationship between ownership structure and reported earnings quality thereby providing a greater understanding of the relationship

1.7 Scope of the Study

The study examined the impact of ownership structure on reported earnings quality. Limits its scope to listed consumer goods companies in Nigeria and covers a period of ten years (2008-2017). The period is chosen because it is the period when the companies in Nigeria undergo both structural and operational reforms. Likewise, 2008 is considered suitable because it is the period when Securities and Exchange Commission Reviewed the 2003 code of corporate governance for public companies in Nigeria to strength the corporate governance mechanism in Nigeria. The choice for the consumer goods firms is informed by the fact that these firms have been neglected in similar studies despite the role that the industry plays in economic development.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Ownership Structure

Ownership structure is seen as the classes or collection of owners that exercise control over activities of a firm. Different scholars have different meaning for ownership structure. To Jensen and Meckling, (1976) ownership structure is defined as the spreading of equity with regard to votes and capital as well as the identity of the equity owners. These structures are of major significance in corporate governance because they determine the inducements of managers and also the economic efficiency of the companies they manage. To Demstz (1983) ownership structure is regarded as the fraction of shares owned by a firm's most importantly stockholders, with much consideration given to the portion owned by the five largest shareholders. Demstz and Lehn (1985) also saw ownership structure as the portion of shares owned by firm's management, which include shares owned by members of the corporate board, chief executive officer (CEO) and top management.

Chiara (1997) viewed ownership structure as a mixture of concentrated ownership and large stockholdings by institutional owners for productivity. Ram and Camela (1998) viewed ownership structure as directors' equity which could be summed up as the percentage stake owned by beneficiary and non-beneficiary directors. Beni and Alexander (1999) defined ownership structure as the composition of diffused ownership and non-owner managed firms. Demsetz and Belen (2001) viewed ownership structure as the mixture of the fraction of shares owned by important shareholding families and the fractions owned by management. This

definition puts into outlook the issue of family ownership in combination with organizational ownership.

Furthermore, Pavel and Alexander (2001) defined Ownership structure as the composition of percentage of voting shares in the hands of the top three shareholders without drawing distinction between state-controlled holdings and percentage of voting shares in the hands of the top three private investors. Wang (2003) opined that ownership structure is the combination of three different groups of ownership namely; managers, control group and institutional investors. Sahut and Gharbi (2010) viewed Ownership structure as the mixture of ownership concentration, managerial ownership and institutional ownership.

Alipour and Amjadi (2011) established that ownership structure is the configuration of the biggest five shareholders, which includes a combination of institutional shareholders, individual and managerial shareholders. Shah, Butt and Saeed (2011) perceived ownership structure to be the percentage of shares held by Directors. Khalil, Syed, and Zahid (2012) observed that ownership structure is the composition of managerial ownership and concentrated ownership. Uwalomwa and Olamide (2012) viewed ownership structure as decisions made by those who own or who would own shares. They measured ownership structure as the composition of Board ownership, Institutional ownership and foreign ownership. Ownership structure is one of the main dimensions of corporate governance and is extensively seen to be determined by country-level corporate governance features such as the development of the stock market and the nature of state intervention and regulation (La Porta, Lopez de Silanes, Shleifer & Vishny, 1998). In addition, it affects the scope of a firm's agency costs (Jensen & Meckling, 1976).

Ownership structure is the spreading and dissemination of a company equity among its key stockholders. The separation of ownership and control gives rise to the conflict of interest

between owners and their managers who run the day to day business of the company. This nexus authorizes the manager's position and leave the firm shareholders with no control over the decision making process. Empirical studies showed that, ownership structure is in two forms, firstly, insiders or managers of a firm who also act as shareholders if they possess some portion of the company shares. Secondly, outsiders who own significant number of the company shares have more power and incentive to monitor management actively especially the financial reporting process, thereby reducing the earnings management probability, also increasing earnings quality. As such, ownership structure is expected to have a positive relationship with earnings quality.

The rise in ownership concentration and earnings quality illustrated that the higher the managerial ownership, institutional ownership concentration and family ownership in relation to spur of both managers and stockholders, the lower the motivation of managers to engage in an opportunistic reporting in order to hide business resources expropriation. From the above clarification, ownership structure components that will be covered in this study comprised of Managerial Ownership, Institutional Ownership, Ownership Concentration and Family Ownership.

2.1.1.1 Managerial Ownership

Managerial ownership signifies the interest of managers in the equity shareholding of a firm. The motive behind the rise of this corporate governance variable is rooted in the agency theory, which assumes that manager's equity holdings inspires them to act in a way that maximizes the value of the firm. Warfield et al. (1995) suggest that the interest of both shareholders and management starts to converge as the management holds a portion of the firm's equity ownership. This implies that the need for intense monitoring by the board should decrease.

Manoranjan (2005) viewed Managerial ownership as the fraction of equity shares held by Insiders and Promoters. Vethanayagam (2005) viewed Managerial ownership as the proportions of director's equity ownership which includes their deemed interest. Andy, Xiaolan, and Alan (2006) documented that managerial ownership is the percentage of a firm's ordinary shares owned by the Chief Executive, or Managing Partner. Ruben and Narine (2004) viewed Managerial ownership as the percentage of shares owned by firm's management that is, the composition of board members, CEO and top management. Arifur, Balachandran, & Paul, (2008) viewed Managerial Ownership as the percentage of ordinary shares owned by the directors, executive directors and independent directors. Wenjuan (2009) viewed Managerial Ownership as the proportion of managers' stock ownership. Laiho (2011) viewed managerial ownership as the insider holdings by the board of directors and the management team. Himmelberg, Hubbard, and Palia (1999) find support for the guesses of the contracting model of managerial ownership. The third theory suggested by Rudiger and Rene (2007) is managerial discretion theory approach. The theory suggests that managers make their decisions subject to limitations imposed by shareholders. If stockholders solve their collective action problem in such a way that they behave as a group and choose the optimal compensation contract for managers, there is no difference between the managerial discretion approach and the contracting approach.

2.1.1.2 Institutional Ownership

Institutional ownership are shares owned by other organisations or institutions such as insurance companies, banks, investment companies and other organized owners. Institutional ownership is important in monitoring management because with institutional ownership it will encourage more optimal supervision. The existence of institutional ownership is considered capable of

being an effective monitoring device in any decision taken by the manager. Agency concept suggests that monitoring by institutional ownership can be an important governance mechanism. In fact, institutional investors can provide active monitoring that is difficult for smaller, more passive or less-informed investors (Almazan, Hartzell & Starks 2005). Moreover, institutional investors have the opportunity, resources, and ability to monitor managers. Therefore, the efficient monitoring suggest that institutional ownership is associated with a better monitoring of management activities, reducing the ability of managers to opportunistically manipulate earnings. The efficient monitoring assumption suggests an inverse relationship between a firm's earnings management activity and its institutional share ownership. In this vein, numerous studies documented that institutional ownership prevents managers to opportunistically engage in earnings management (Bange & De Bondt 1998; Ebrahim 2007; Koh 2003).

Considering the importance of corporate governance in firm's management, shareholder's active participation in monitoring management functions is important to ensure good corporate governance practices. To date, institutional investors' participation has emerged as important force in corporate monitoring to serve as mechanisms to protect minority shareholder's interest. The significant increase in the institutional investors' shareholdings has led to the formation of a large and powerful constituency to play a significant role in corporate governance. Earnings information, as part of accounting information, provides investors with relevant information that would help them in making correct asset pricing and investment decisions (Yuan & Jaing, 2008). The active monitoring hypothesis views institutional investors as long-term investors with raving incentives and motivations to closely monitor management action (Jung & Kown, 2002).

However, some argue that institutional investors do not play an active role in monitoring management activities (Claessens & Fan 2002; Porter 1992). According to Duggal and Millar

(1999), 'institutional investors are passive investors who are more likely to sell their holdings in poorly performing firms than to expend their resources in monitoring and improving their performance'. Institutional investors may be incapable of exerting their monitoring role and vote against managers because it may affect their business relationships with the firm. Accordingly, institutional investors may collude with management (Pound 1988; Sundaramurthy, Rhoades & Rechner 2005). It is also argued that institutional owners are overly focused on short-term financial results, and as such, they are unable to monitor management (Bushee 1998; Potter 1992). So, there will be a pressure on management to meet short-term earnings expectations. These arguments indicate that institutional investors may not limit managers' earnings management discretion and may increase managerial incentives to engage in earnings management.

2.1.1.3 Ownership Concentration

Ownership concentration is an amount of the existence of large block holders in a firm (Thomsen & Pedersan, 2000). Usually, a stockholder who holds 5% or more of a company equity is reflected a major stockholder. The shareholding of an owner should be significant enough to provide for monitoring the action of the management. The major shareholder can be an individual, a domestic foreign corporation, an institutional investor and or the state. Large block holders have greater incentive to monitor management as the costs involved in monitoring is less than the benefits to large equity holdings in the firm. Ramsey and Blair (1993) pointed out that increased ownership concentration provides large block holders with sufficient incentives to monitor managers. Demsetz and Lehn (1983) and Stiglitz (1985) found that large block holders have the incentive to bear fixed cost of collecting information and to engage in monitoring mechanisms.

In contrast dispersed ownership leads to weaker management monitoring. That is in a situation where the shareholders hold lower stock in a firm the incentive to monitor management is low because the costs involved in monitoring outweigh the benefits to be derived. Therefore, Pedersen and Thomsen (1999) as cited in Wen (2010) defined ownership concentration as the share of the largest owner and are influenced by absolute risk and monitoring costs. Composition of Ownership of a Firm is one of the main dimensions of corporate governance and is widely seen to be a determining factor in ascertaining good corporate performance as well as ensuring qualitative financial reporting. The problem generated by concentrated ownership in the firm among managers and minority shareholders has been very difficult to mitigate within agency problem, this was as a result of the tightness of ownership that allowed self-interest behaviour of manager to go internally unopposed by the board of directors which give room to the managers to determine how the company may be run and use the opportunistic behaviour to expropriate minority shareholders' wealth.

Ownership concentration refers to the spreading of the shares owned by a certain number of individuals or institutions; the ownership mix on the other hand, is related to certain institutions or groups such as government, private company or foreign partners among the shareholders (Claessens & Djankov 1998).

The role of ownership structure in the setting of concentrated ownership is to assess the cash flow contents with regards to block holder's role in the perspective of diffused ownership. The accounting literature contains extensive research on how the agency problem between owners and managers affects earnings quality as well as the quality of accounting information of firms.

2.1.1.4 Family Ownership

When a family has an ownership stake in a firm and is able to shape its strategic direction, the firm is said to be a family-owned firm (Chua et al., 1999). In these firms, the principal and the agent often belong to the same family (Anderson & Reeb, 2003). Family firms constitute around 175 firms of 500 big American firms according to International Family Enterprise Research Academy (IFERA). Various criteria in different countries segregate family firms from non-family enterprises which lead to different surveys and most often contradictory results. Usually major blocks of family firms stock are owned by one or several family members where some of them are in fact in managerial positions serving the company. According to academics, had the level of stocks owned by managers' reaches certain level the outperforming incentive of managers is provoked. Although family matters come first in these enterprises and subsequently alignment of interest between major and minority shareholders is not certain.

However, questions of whether family ownership provides incentives to reduce agency costs or create it still remain an open issue. There are two inconsistent views with regards to the association between family ownership and agency costs. On one hand, several academics agree that concentrated shareholdings in the hand of family have incentives to reduce agency costs through a better alignment of shareholder and managerial interests. Bartholomeusz and Tanewski (2006) highlight several reasons as noted by prior researchers that favour family firms as agent to reduce agency costs. However, Fama and Jensen (1983) indicate that family firms would be more efficient than firms with dispersed ownership because of lower monitoring costs. According to Schulze (2001), there are at least three reasons why family firms incur significantly lower agency costs compared to other firms. First, owner management in family firms naturally aligns the owners and manager's interests relating to growth opportunities and

risks. The alignment reduces their incentive to be opportunistic, sparing firms the need to maintain "costly mechanisms for separating the management and control of decisions" (Fama & Jensen, 1983, p. 208). Second, in family firms, property rights are largely restricted to internal decision agents whose personal involvement assures that managers will not expropriate shareholder wealth through perquisites consumption and misallocation of resources (Fama & Jensen, 1983). Finally, in family firms, shares are held by family members, who have special relations with the managers and thus have an advantage in monitoring and disciplining the managers (Fama & Jensen, 1983).

Andres (2008) noted that large investors such as family shareholders have the incentive and power to decrease agency costs. Unlike small shareholders, large shareholders have a big enough stake that encourages them to spend private resources to monitor management. Further, it is much easier for large shareholders to coordinate their actions and put pressure on managers since voting power is not divided into highly segmented group of investors (Andres, 2008). In family firms, incentives to monitor managerial actions are particularly strong since families usually have invested most of their private wealth in the company and are not well diversified. Family shareholders also have an advantage in monitoring as their long term presence in the firm provides the relevant firm-specific and market knowledge. A family's special technical knowledge concerning a firm's operations may put it in a better position to monitor the firm more effectively (Bartholomeusz & Tanewski, 2006).

According to Bartholomeusz and Tanewski (2006) other studies also draw attention to the possibilities that concentrated ownership by family firms create agency costs. First, family firms might use their concentrated block holding to expropriate the wealth of outside shareholders through excessive compensation, related party transactions and special dividends. Second, given

that their wealth is undiversified, family firms tend to be risk avoidance where they might use their control to invest in less risky projects which are not aligned with other shareholders' interest. Third, under the pyramidal control structure (which is common in family business group) family firms may create agency costs if the family members pursue the interest of other members at the expense of outsiders. However, Fan and Wong (2002) argue that family ownership limits accounting information flows to outside investors. As a results, family members have the incentive and opportunity to manipulate accounting data. Contrary, Ali, Chen, and Radhakrishnan (2007), suggested that family firms have higher earnings quality than non-family firms, although family firms disclosed the less information compared to non-family ones. In addition, Wang (2006) suggested that founding family ownership is significantly associated with lower abnormal accruals, greater earnings informativeness, and less persistence of transitory loss component in earnings, after controlling for potential bias from time-series correlation, executive compensation, and nonfamily block holder ownership.

2.1.2 Concept of Earnings Quality

The extant literature has not yet come to a unanimous conclusion on what earnings quality mean; rather it is viewed as a conceptual term that can be defined from many different perspectives. Academic researchers have introduced and operationalized different dimensions of earnings quality constructs using certain characteristics of earnings and its components. Penman & Zhang (2002), define earnings quality from perspective of analyst as reported earnings before extraordinary reported in income statement that is good indicator of future earnings. Their notion is that consistency use of accounting methods lead to sustainable reporting which is deemed to be of high quality that can be used to predict future earnings. However, Teets 2002, define earnings quality as accounting earnings that reflect information about value of company.

From a decision-usefulness viewpoint, earnings quality is regarded as being high if the earnings numbers are useful for decision making purposes. Based on this point of view, the notion of earnings quality is defined differently by different users of financial statements. For instance, Dechow and Schrand (2010) define the quality of earnings as relevant of the fundamental earnings reported to the decision context of users. Likewise, Vincent (2004) defined the quality of earnings as decision usefulness of the reported earnings to the users. In this context the quality of earnings is how earnings information is indispensable to markets participants in making decision of resources allocation in the capital markets. This is consistent with the objectives of financial analysts, which are to evaluate the performance of the company, assess the extent to which current earnings indicates future performance and determine whether the current stock price reflects intrinsic firm value. Investors are likely to have similar objectives. On the other hand, creditors and compensation committees may define high quality earnings as earnings that are easily convertible into cash flows and that reflect managers' real performance.

Financial statement users may also define earnings quality in terms of the absence of earnings management. This is because the intentional manipulation of earnings by managers, within the limits possible in accounting standards, may distort the usefulness of earnings to users. Earnings that are persistent and predictable may not be of high quality if it is a result of earnings management. Managers may tend to manage earnings for a number of reasons including those related to capital market motivations, compensation and bonus as well as debt or lending contracts, which will result in low quality of earnings. According to Schipper and Vincent (2003), debt agreements based on low and defective earnings will induce unintended wealth transfers; overstated earnings used as an indicator of managers' performance in compensation

contracts will result in overcompensation to managers; and low quality of earnings will provide defective resource allocation signals to investors.

Dechow and Schrand (2004) stated that when earnings conform to the spirit and the rules of generally accepted accounting principles, they are of high quality in the eyes of regulators. Earnings should be free from fraud and show a true and fair view of a company's financial performance. However, accounting standard setters are also concerned with the effectiveness of the standards that they have promulgated. By focusing on the usefulness of earnings numbers to financial statements users, standard setters can evaluate quality of earnings prepared under a particular set of accounting standards.

Other than the decision-usefulness context, earnings quality has also been explained in prior research using the economics-based definition of Hicksian income (Dempster, 2008; Hodge, 2003; Schipper and Vincent, 2003). Shipper and Vincent (2003) defined earnings quality as the extent to which reported earnings faithfully represent Hicksian income, where representational faithfulness means correspondence or agreement between a measure or description and the phenomenon that it purports to represent". This construct measures the quality of earnings based on its correlation with "true earnings", which does not depend on accounting recognition rules and the implementation of the accounting rules. True earnings are a neutral and context-free benchmark, yet difficult to assess as Hicksian income is not observable. However, since Hicksian earnings is not observable, the construct is not operational (Schipper & Vincent, 2003).

Yee (2006) explained that earnings quality depends on two main components, the fundamental earnings and reported earnings. The former is a profitability figure that measures a firm's ability to make future dividend payments, while the latter is an imperfect signal or estimation of fundamental earnings that a firm announces. According to Yee (2006), earnings quality is based

on the ability of reported earnings to quickly and precisely reveal a firm's fundamental earnings. The more accurate and timely that reported earnings reflect shocks in the present value of expected future dividends, the higher the quality of earnings.

Subsequently, Chan, Jegadeesh and Lakonishok (2006) defined the quality of earnings as the degree to which reported earnings indicate operating fundamentals of an entity. This measure of quality is interested in the ability of reported earnings to predict future performance of an entity.

Srinidhi, Gul and Tsui (2011) described earnings quality as the ability of current reported earnings to reflect the future cash flow and earnings. In this context earnings quality refers to how best current reported earnings can predict future performance of entity. Similarly, Bellovary, Giacomino and Akers (2005), and Li (2011) defined earnings quality as the ability of earnings to reflect company permanent earnings.

2.1.2.1 Earnings Quality Measurements

Prior studies defined earnings quality through certain characteristics of earnings such as persistence or sustainability, predictive ability, smoothness, conservatism, value-relevance, timeliness, earnings management or earnings manipulation and accrual quality. In general, earnings viewed as being of high quality are those that have a high level of persistence, are more predictable, less volatile, more timely, have lower level of earnings management and/or higher accrual quality. The following subsections discuss each of the measures, which have frequently been used in prior studies.

Accrual Quality: The difference between cash from operating and recorded earnings generated by business indicates accrual quality (Richardson et al. 2001, Desai et al. 2006). Likewise, error on estimating the accrual has also been used in measuring the quality of accrual (Francis,

LaFond, Olsson, & Schipper, 2004, Jing 2007 & Johnston 2009). Dechow and Dichev (2002) introduced the model for earnings quality based on the view that the function of accruals is to adjust the recognition of cash flows over time, so that it better reflects firm performance. This model relates total current accruals (TCA), measured by changes in working capital, to lagged, current and future cash flows from operations, and has been used in the existing studies as a proxy for earnings quality (Aboody, Hughes, & Liu, 2005; Francis et al.; Francis, Myers, Myers, & Omer, 2003; Van der Meulen, Gaeremynck, & Willekens, 2007). In the model, the total current accrual is measured by changes in working capital, since related cash-flow realizations generally occur within one year.

This model captures both intentional and unintentional accrual estimation error by management, which is the inverse measure of earnings quality (Hermanns, 2006). In other words, the estimation error indirectly measures the extent to which accruals map into cash realization, where a poor match indicates low quality.

Since the Dechow and Dichev (2002) approach provides a direct link between income and accruals, this model does not have the same problems as the earnings management approach introduced by Jones (1991)¹², which requires the assumption that certain underlying accounting fundamentals remain constant and unmanipulated. However, Dechow and Dichev (2002) model is also subject to some limitations. Schipper and Vincent (2003) highlight that the model does not distinguish non manipulative estimation errors from intentional earnings management and requires the assumption that working capital accruals lag or lead cash receipts by no more than one year.

McNichols (2002) suggested that future research should include the change in revenues and property, plant and equipment (PPE) as additional explanatory variables in the Dechow and

Dichev (2002) model, in order to distinguish the unintentional accrual estimation error from those that are intentional. However, inclusion of the new explanatory variables would require the same assumptions as in the Jones (1991) model. Based on the McNichols (2002) discussion of the Dechow and Dichev (2002) model, Francis et al. (2005) examine the market pricing of accruals quality by investors. Their results show that the market requires less return from firms with better accruals quality than from firms with poor accruals quality.

Earnings Management: Davidson, Stickney and Weil (1985) define earnings management as the process of taking deliberate steps, within the limitations of generally accepted accounting practice, to bring about a desired level of reported earnings. Similarly, Healy and Wahlen (1999) noted that: Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to adjust financial reports to either mislead some shareholders about the underlying economic performance of the company, or to influence contractual outcomes that depends on reported accounting numbers. It is clear that earnings management is possible because

of the discretion available to managers in preparing financial reports. However, it is limited to the boundaries set under a particular set of accounting standards. Thus, any changes in the amount or extent of managerial discretion allowed under the accounting standards may also change the degree of earnings management.

The literature on earnings management suggest that earnings management exists due to the important roles and functions played by the reported income or earnings number. As claimed by Bauwhede (2001), managers may be inclined to manage earnings due to the existence of the firm's explicit and implicit contracts, the firm's relation with capital markets, the need for

external financing, the political and regulatory environment or several other specific circumstances.

Zheng (2003) claims that the purpose of earnings management, as stated in Healy and Wahlen's (1999) definition indicates that managed earnings are of lower quality than unmanaged earnings. Consistently, previous studies on earnings quality (e.g. Barth, Landsman, and Lang, 2008; Chen, Dhaliwal, and Trombley, 2007; Van Tendeloo and Vanstraelen, 2005) use the term „earning quality“ to denote the absence of earnings management. In addition, Levitt (1998) mentioned that when earnings management is on the rise, the quality of financial reporting is on the decline.

Prior studies have adopted a variety of approaches to measuring the degree of earnings management. Healy (1985), DeAngelo (1986) and Jones (1991) are among the early studies that use abnormal accrual models to detect earnings management. Dechow, Sloan and Sweeney, (1995) explain the development of these early models and give detailed descriptions and provide comparisons between the models. Dechow et al. (1995) found that among Healy (1985), DeAngelo (1986), Jones (1991), modified Jones model and industry model, the modified version of Jones (1991) model is the most powerful method of detecting earnings management.

Many of the existing studies refer to Jones (1991) model as a basis for assessment of the level of earnings management. In the Jones (1991) model, the concept of discretionary accruals is used to indicate the quality of earnings. The main idea in the Jones (1991) model is that accruals are likely to be the result of managerial discretion and changes in the firm's economic environment (Hermanns, 2006). Basically, the model estimates firms' abnormal accruals (discretionary) based on certain economic and accounting fundamentals using time-series regression. In the model, Jones relates total accruals to the change in sales and the level of gross property, plant and

equipment. The residuals of the model are considered as abnormal or discretionary accruals as they are not explained by the firm's economic conditions.

According to Jones (1991), revenue is included in the model because it is an objective measure of the firm's operations before managers' manipulations. It is expected that total accruals, which includes changes in accounts receivables, inventories and accounts receivables rely on the extent of changes in revenue (Jones, 1991). While revenues are included to control for firms' economic environment, the gross, property and equipment is included to control for the portion of total accruals related to nondiscretionary depreciation expense. The prediction error in the model, ϵ_{it} , measures the level of discretionary accruals.

Similar to the Jones and modified Jones with the addition of ROA is the Performance Adjusted Current Discretionary Accruals (PACDA) Model suggested by Kothari, Leone, and Waslwy, (2005). The reason for including a performance variable in the discretionary accrual regression model is that Kothari et al., (2005) indicated that firm performance and estimated discretionary accruals exhibit a mechanical relationship after controlling the effect of performance, and those discretionary accruals have higher reliability. This measure improved the discretionary accruals estimated by the Jones and modified Jones models in mitigating type 1 error in which the firms having no earnings management are wrongly recognized as having engaged in earnings management. The Kothari et al (2005) embodiment of two modifications of the Jones and the modified Jones Models serve as an intercept to mitigate heteroscedasticity; deflating by lagged assets in the Jones 1991 model is meant to mitigate heteroscedasticity. Finding that heteroscedasticity is still an issue, Kothari et al (2005) also included an intercept to mitigate it. They found that an intercept yields higher symmetry around zero discretionary accruals, which enhances the power of tests for type I error, and an additional control for the lagged rate of return

on assets, ROA_{t-1}. But it was pointed out that performance adjusted discretionary accrual model mitigate misspecification in samples with extreme ROA and exaggerate misspecification in samples with extreme firm size, implicitly assuming that any distortion due to firm growth is minimal.

Earnings Persistence: Persistence of the reported earning is commonly used measure of earnings quality which is measured by the sustainability of the reported earnings of firm (Penman & Zhang 2002; Francis, et al. 2004). Earnings which are more persistent are more sustainable and are of high quality; likewise, earnings which are less persistent are more temporary are considered to be of lower quality (Penman & Zhang 2002; Francis et al. 2004). Focusing on investors perception of earnings quality, Ayres (1994) noted that one view of earnings quality relates to the overall permanence of earnings. That is, high quality of earnings reflects earnings that can be sustained for a long- period. Similarly, study that investigated the joint effects of accounting conservatism and investment on the quality of earnings, Penman and Zhang (2002) define high-quality earnings to be sustainable earnings as often referred to in financial analysis. They explain that when an accounting treatment produces unsustainable earnings, it indicates that the earnings figures are of poor quality.

Sloan (1996) led a stream of studies on earnings persistence that decomposes earnings into two underlying elements; accruals and cash flows. He analyses the characteristics of information (about future earnings) contained in those two components of current earnings and examine the extent to which this information is reflected in stock prices. Sloan (1996) argued that the accrual and cash components of earnings are both relevant to financial statement users, but the former is less reliable, and therefore that the accrual component of earnings is less persistent than the cash

flow component. This signifies that there is a negative link between the magnitude of the accrual component of earnings and the persistence of current earnings, and thus earnings quality.

Earnings Predictability: Predictability of earnings represents the ability of the reported earnings to predict future component of operating income. Barragato and Markelevich (2008) define high-quality earnings as an earnings stream that is a better predictor of future operating cash flows. They claim that their definition of earnings quality frequently appears in financial analysts reports and treatises of financial statement analysis, which supports the view that financial statements should provide information that is useful in assessing the amounts, timing and uncertainties of prospective cash inflows.

Value Relevance: In much of the accounting research into financial reporting quality, earnings quality is measured by its value-relevance to investors in relation to equity valuation (e.g. Cheng, Hsieh, & Yip, 2007; Lang, Raedy, & Wilson, 2006; Lang, Raedy, & Yetman, 2003; Leuz, Nanda, & Wysocki, 2003). These studies relate earnings directly to stock prices or market returns. The association (the slope coefficient or the explanatory power of the model) between earnings and stock market performance suggests that earnings are both relevant and reliable to investors (Barth, Beaver, and Landsman, 2001). Generally, earnings are considered to be higher in quality if it is more value- relevant. As claimed by Bao and Bao (2004).

Timeliness: Timeliness of earnings is often regarded as one of the attributes of earnings quality. According to Abdullah (2006) timelier reporting is related with higher accounting quality as users are able to use the information for such purpose as valuation and evaluation. More timely information (including earnings) is more relevant and so more valuable for financial statements users. Grounded on this idea, a number of studies use timeliness as one of the qualities of desirable earnings. In Francis et al. (2004), which examines the association between cost of

equity and earnings quality, the quality of earnings is represented by seven different attributes including timeliness.

In Beekes, Pope and Young (2004), timeliness is defined as the length of time taken to reflect information in earnings. Similarly, Raonic, McLeay and Asimakopoulos (2004) state that: Reported earnings may be considered to be timely when they fully reflect the information that has been incorporated by the market in its pricing of a firm's equity. Earnings are less timely if value changes that are documented by the market in the present period are not incorporated in the accounting computations until sometime in the future.

Using different approaches to defining earnings quality, the extant literature emphasizes that the quality of earnings is very essential to users of financial information as well as to practitioners, regulators and accounting researchers. This is because reported earnings are considered to be the foremost information in financial statements. According to Salvato and Moores (2010) high quality accounting information on characteristics such as earnings is essential for firms to access equity and debt markets. The informative function of earnings means that it is often used as a basis to describe the financial performance of a firm. For example, the earnings numbers and various ratios or metrics derived from it are widely used in compensation agreements and debt agreements (Schipper & Vincent 2003). Earnings are also used by analysts to evaluate firms' previous and current performance and forecast firms' future ability to create additional wealth to shareholders.

Agreeing with Schipper and Vincent (2003) the significance of earnings quality can be explained from at least two perspectives, the contracting perspective and investment perspective. From the contracting viewpoint, low quality of earnings may result in unintentional wealth transfers. For instance, firms that reward managers based on earnings may overcompensate the managers if

earnings are overstated. From an investing view, poor quality of earnings is problematic as it can mislead investors, resulting in misallocation of resources (Myers et al., 2003; Schipper and Vincent, 2003). High earnings quality would also increase the attractiveness of stocks to outside investors and increase market liquidity (Young and Guenther, 2003), lower cost of debt (Salvato and Moores, 2010), reduce cost of capital (Leuz and Verrecchia, 2000; Salvato and Moores, 2010), and promote more efficient capital allocation (Biddle, Hilary, and Verdi, 2009; Bushman, Piotroski, and Smith, 2011). Therefore, it is very important for the reported earnings to be high in quality.

2.2 Empirical Review

Relationship between ownership structure and earnings quality has been debated in the literature- using the variables of managerial ownership, institutional shareholding, ownership concentration and family ownership. The confirmations from these previous studies have yielded inconsistent results.

2.2.1 Managerial Ownership and Earning Quality

Numerous studies were carried out to address both linear and non-linear relationship between managerial ownership and earnings quality. However, there is no consensus from the results. While some establish positive relationship, others indicate negative one. Waidi and Johnson (2016) studied the connection between corporate ownership structure and financial reporting Quality listed deposit money banks in Nigeria for the period of 2005 to 2013. Using Ordinary Least Square (OLS) Regression techniques, results indicated that managerial ownership has a positive insignificant effect on earnings quality.

Amah, Michael and John (2016) investigated the effect of corporate governance and ownership structure on earnings management of Brewery industries. 2004 to 2013. Regression technique, was used to analyse the data, the result showed that CEO and Managerial ownership have positive significant effect on Earning management.

Imad (2015) examined the effect of ownership structure on earnings quality of listed firms Jordanian Amman Stock Exchange (ASE) for the period 2000-2014. With the help of panel regression, the empirical result shows that management ownership is associated inversely with the earnings quality. This study was conducted only for Jordanian firms and finding may not be applicable to smaller firms in the developing country.

More so, Wafa and Younes (2014) studied the link between managerial ownership and earnings quality, using a sample consisting of 117 firm-year observations drawn from the firms listed on the Stock Exchange of France for the period concerning 2003-2011. Their results revealed a positive significant impact between managerial ownership and reported earnings quality. Wafa and Younes (2014) study was conducted in developed economy as such their findings and conclusion may not be completely applicable to emerging economy like Nigeria.

In another study by Isenmila and Elijah (2012) they examined earnings management and ownership structure of Nigerian Banks for the period between 2006-2010. The samples consist of 10 commercial banks as at 2012. The relationship between Insider Ownership and Earnings Management was also observed to be positive and statistically significant. The result of the study might have been overtaken by events and the difference of the environments is also factor that could impair the external rationality of the study

Teshima and Shuto (2008) examined the effect of managerial ownership on earnings quality. The study test a large sample of 18,790 Japanese firm year observations from 1991 to 2000 and used the Kasznik (1999) model to measure discretionary accruals, which control Cash Flow from Operation. The outcome denoted a positive significant effect among managerial ownership and earnings quality.

Hashim and Devi (2008) studied the interaction between corporate governance, ownership structure and earnings quality in Malaysia, using a sample of 426 non-financial firms listed on Bursa Malaysia Main Board for the period between 1999 and 2005. The study fails to establish any significant relationship between managerial ownership and earning quality.

You, Zhong, Donald and Zheng (2007) examine the effect of block-holders on earnings management. Their sample comprised of 5,475 firms for the period between 1994 and 2003. Earnings management was measured by cross-sectional modified Jones (1991) model. They found block-holder ownership to be positively associated with discretionary accruals.

Tsai and Lin (2003) examined the relationship between managerial ownership and earnings quality in Taiwan. They used criteria to arrive at 2030 firm-year observations, drawn from 393 corporations for the period of 1991-2000. They found a negative relation between managerial ownership and earnings quality, suggesting that with low managerial ownership earnings quality reduces.

Using Australian data, Koh (2003) examined the association between managerial ownership and Australian firms' aggressive earnings management practice. He tests only income-increasing accruals for a sample of 107 firm-year observations from 1993 to 1997. The main findings are a positive association, with a smaller magnitude of income-decreasing accruals for all

specifications, consistent with the view that high managerial ownership encourages managerial accruals discretion.

Tsai and Lin (2003) examined the effect of managerial ownership on management adjustment of accounting accruals. With a sample of 393 corporations listed on Taiwan Stock Exchange between 1999 and 2000, the study documents a negative and significant relationship between managerial ownership and discretionary accruals. This study was conducted in China, a country which is inclined to the communist system of government is expected to have a different corporate governance mechanism and economic structure from that of Nigeria.

2.2.2 Institutional Ownership and Earning Quality

Prior studies have documented conflicting results concerning the effect of institutional shareholding on reported earnings quality. Using a sample of 44 non-financial East African listed firms on the Nigerian Stock Exchange, Janeth and Cosmas (2016) studied the effect of ownership structure on accrual and real earnings management. Their study used General Least Square regression approach. The findings show that institutional ownership and ownership concentration has significant negative effect on real earnings management of listed non-financial firms in East African.

Using data from food and beverages sector, Salisu, Bashir Abubakar and Aliyu (2016) studied the interaction between institutional ownership and earnings quality in Nigeria for the period of 2002- 2014. The General Least Square Regression was employed for data analysis. The results reveal that institutional ownership has positive significant link with earnings quality. Their study focused on the sub-sector of the consumer goods firms with institutional shareholding as a proxy

of ownership structure as such their study is deficient in terms of variables and also their outcome cannot be generalized to consumer goods sector in Nigeria.

In another study by Eman and Ibrahim (2015) evaluate the relationship between ownership structure, corporate governance mechanism and accounting earnings quality on financial performance of listed Egyptian firms for the period of 2006-2013. The study employed panel regression techniques. The results showed that institutional ownership has a negative significant relationship on earnings quality and firm value. The study used time series data which may not be able to allow for evaluation of one firm with another.

In the same vein, Laith (2015) studied the nexus between ownership structure and earnings quality of listed firms in Jordanian context. With the aid of Chi square technique, the results show that institutional ownership, family ownership and foreign ownership are positively and significantly related with quality of earnings. Laith (2015), study suffered certain limitations. First, the study does not state the population from which the sample is drawn. Secondly, the sampling technique is not clear. And lastly, the techniques of analysis used in the study is also weak in that it is not a powerful technique to investigate cause and effect relationship. As such, the result is considered invalid for policy formulation.

In Malaysia, Redwan and Ku (2013) studied the effect between governance structure, ownership structure and Earnings quality through earnings predictability. Using a sample of 330 firms for the period of 2008 to 2009. With the aid of panel regression techniques. The findings showed among others that institutional ownership has a positive insignificant effect on earnings predictability of listed firms in Malaysia. The result has clearly demonstrated that firms with more institutional investors significantly monitor the opportunistic behavior of managers. The

study did not cut across firms in different sector. As such, the result and the outcome may not be generalized.

Shaikh, Iqbal, Shah and Bhutto (2012) studied Institutional Ownership and Discretionary Accruals using a sample size of 68 listed non -financial companies from a population of 652 companies listed on Karachi Stock Exchange (KSE). The data was gathered for the period of 5 years, starting from 2006 up to 2010. Modified Jones Model was employed for the study to quantify discretionary the result revealed a negative but not significant relationship between institutional ownership and discretionary accruals.

In another study by Alves (2012) examined the relationship between corporate ownership structure in Portugal and earnings management. Using a sample of 34 non-financial listed Portuguese firms for the period between 2002 to 2007. They found that, the coefficient of institutional ownership variable was positive and significant, the result was without control variables. However, the result was not corroborated when control variable was added; the coefficient on institutional ownership was negative, but not statistically significant; while discretionary accruals as a proxy for earnings management was negatively associated to ownership concentration. The study's result suggested that ownership concentration improved the quality of annual earnings by reducing the levels of earnings management. Furthermore, discretionary accrual management was negatively related to managerial ownership. This means that when managers also form part of equity owner, they report earnings that represent the true performance of the firm.

In the same way, Shehu (2011) investigated the effect of corporate governance on reporting earnings quality with a sample of 63 banks listed on the Nigerian Stock Exchange for the period between 2007-2010. The study found a positive and significant relationship between institutional

shareholding and reporting earnings quality. The study focused on the banking industry which has different governance structure from that of the consumer goods firms. In the same vein, using 22 non-financial firms listed on Tunis Stock Exchange for the period between 1997 to 2007, Klai and Omri (2011) documented a positive relationship between institutional investors, who are the major shareholders of Tunisian firms and who are also of significant presence on the board of directors, and reporting earnings quality.

Al- Al-Fayoumi, Abuzayed and Alexander (2010) examined the interaction between ownership structure and earnings quality. Using a sample of 195 firm-year observations, consisting of Jordanian industrial firms for the period between 2001-2005, they fail to find a significant relationship between institutional shareholding and discretionary accruals. Although, this study was carried out in the context of a developing country, the differences of economies and regulatory frameworks call for an investigation into the Nigerian scenario.

Using a sample of 20 randomly selected quoted and active companies on the Nigerian Stock Exchange, Dabo and Adeyemi (2009) examined the relationship between institutional investors and earning quality. The study failed to establish to any statistical evidence to either accept or fail to accept their hypothesis. This could be due to the use of chi-square, which is a less effective method of data analysis for establishing cause and effect relationship.

Yang, Chun and Ramadili (2009) examined the Effect of Board Structure and Institutional Ownership Structure on Earnings Management in Malaysia. The sample consists of 613 firms from construction, industrial products and consumer products sectors selected from the main board. Multiple regression result revealed that institutional ownership has a negative relationship with earnings management, however, the result is not statistically significant. The findings

indicate that in contrast to the evidence in developed markets, institutional shareholders in Malaysian firms are not an effective mechanism to constrain the earnings management.

Shah, Zafar and Durrani (2009) investigated 654 listed companies in Karachi Stock Exchange. The sample consists of 120 listed companies from different sectors. The correlation result shows that institutional ownership is statistically negatively correlated with discretionary accrual. They found a statistically negative relationship between institutional ownership and earnings management; this suggests that the presence of institutional investor prevent management from manipulating the reported earnings.

Ali, Salleh and Hassan (2008) investigated the impact of ownership structure on earnings management in Malaysia between the period of 2002 and 2003. The sample was reduced to 1001 from 1484, as some firms that lacked the information were excluded. Earnings management was estimated based on Jones (1991) model. The result indicated that institutional ownership has negative and significant relationship with discretionary accruals. in the same vein, managerial ownership has a negative and significant relation with discretionary accruals. The result of their study has been leave behind by time and the difference of the settings is also an element that could blight the external validity of the study.

Furthermore, Hashim and Devi (2006) investigated the effect of corporate governance, ownership structure and earnings quality of companies listed on Bursa Malaysia's Main Board. The population of the study was 592 non-financial companies, the final sample comprised of 280 non-financial companies with complete data for computing earnings quality and corporate governance variable. They looked at earnings quality from the perspective of accruals which is measured as accrual quality. They found a positive significant association between institutional ownership and earnings quality.

Also, Velury and Jenkins (2006) examined all firms listed on Compact Disclosure, for the period 1992–1999. Earnings quality is measured from the FASBs conceptual framework. They documented a positive association between institutional ownership and earnings quality, suggesting that, institutional investors serve as effective monitoring mechanism that improves the quality of reported earnings. In addition, the results indicated that concentrated institutional ownership may negatively affect earnings quality.

In a related study, Han (2005) study ownership structure and reporting earnings quality. The sample consists of all firm year observations for the period 1997 to 2001. Apart from measuring institutional ownership and managerial ownership he further calculated per capital institutional and managerial ownership which is measured as the number of top officers and directors and institutional investors listed in the database for each firm. He found that the univariate and bivariate results provided evidence that higher institutional ownership has a positive effect on the quality of earnings. The findings of the study might not be applicable to current economic condition of the consumer's good sector for the fact that it might have been overtaken by the expression of time.

2.2.3 Ownership Concentration and Earnings Quality

Zhizhong and Qingmei (2016) studied the interaction between ownership concentration and reported earning quality of listed China firms for period of 2004 to 2011. The study employed panel regression. The findings established a positive interaction between ownership concentration and reported earnings quality. The outcome of the is only valid in country which the study was conducted as such it is not applicable in Nigeria setting due to different governance structure.

Using panel data of firms quoted on the Brazilian Stock Exchange during the period 1994 to 2014, Erivelto and Fernando (2016) investigated the association between ownership concentration and reporting earnings quality. Their study proxy's earnings quality with earnings persistence and asymmetric timeliness (conservatism). The General Least Square result established positive significant nexus concerning ownership concentration and reported earning quality. The outcome of the study may not be replicated in Nigeria considering the environment and again it may not be applicable to other industries in Nigeria context.

In Nigeria, Hajara (2015) studied the nexus between ownership structure and reported earnings quality of listed insurance companies for the period of 2008 to 2013. With the aid of panel regression techniques, the results established a negative connection between Institutional Ownership Managerial ownership and ownership concentration on earnings quality. The study failed to considered family ownership as proxy for ownership structure. Likewise, the study was conducted in the context of financial sector, as such the finding might not be applicable in the context of consumer goods sector in Nigeria.

Using dataset from deposit money banks, Bawa and Isa (2014) studied the interaction between ownership structure and reported earnings quality in Nigeria. The study employed Ex-post factor research design. The study used panel regression as a method of analysis. The results establish a positive link between ownership concentration and reported earnings quality. The study considered only the financial sectors in Nigeria. Therefore, the study is devoid of external validity for the fact that it cannot be applicable to consumer's goods sectors in Nigeria.

Using a sample of all 104 non-financial firms listed on Casablanca Stock Exchange between 2004 and 2007, Farooq and El Jai (2012) failed to establish a significant association between ownership concentration and earnings quality.

Klai and Omri (2011) investigated the association between ownership concentration and earnings quality. The results indicate that ownership concentration is negatively associated with reporting earnings quality, implying that shareholders use their power to expropriate firm resources which increases earnings manipulation and information asymmetry.

Roodposhti and Chashmi (2010) examined ownership structure and earnings quality of listed Tehran Stock Exchange for the period between 2004 and 2008. The sample was arrived at after excluding financial firms which was up to 196 firms. Panel data method was employed as technique to estimate the model. They found discretionary accruals as a proxy for earnings quality and it was negatively related to ownership concentration.

Javid and Iqbal (2010) studied the determinants of ownership concentration, the effect of ownership concentration on a firm's performance with the sample of fifty representative firms from different manufacturing sectors of the Pakistan's economy during 2003 to 2008. The measure of ownership concentration is defined as percentage of share owned by the largest five shareholders in a firm, and a block is defined to be any entity owning more than 10 percent of a firm. The results suggested that there is statistically negative relationship between ownership concentration and corporate performance.

2.2.4 Family Ownership and Earning Quality

Evidences documented by previous studies have revealed that concentrated family ownership have the tendency to either allay or exacerbate agency problem. In this light, Pattaraporn, (2016) investigated the impact of ownership structure on financial reporting quality. With a sample consisting of non-financial institution in Thailand Stock Exchange for the period of 2011. With the aid of independent pooled regression. The study reveals negative significant link between

family ownership and reporting earnings quality. The flaws of this study rested on the time frame which reduces the robustness of the result and the manner for the collection of sample was unclear.

On the contrary, Using a pooled data of 280 of non-financial institutions. Hafiza and Susela (2014) studied the impact of corporate governance, ownership structure and reported earnings quality listed firms Malaysia. The study used ordinary least squares regression model to examine the relationship between explanatory variables and reported earnings quality. Findings indicates family ownership positively related with reported earnings quality The study considers data of only one year. The results may differ across different years if multiple years are considered for analysis.

More so, Tim (2013) examined the influence of family ownership and earnings quality of listed firms on the Australian Stock Exchange. The study used multiple regression as technique of analysis. The outcome reveals a positive significant nexus between family ownership and earnings quality. The outcome is not encircling as such, the results of the study cannot be generalized in Nigeria setting.

Using panel data from Turkey, Hümeýra (2013) studied the impact of corporate governance, family ownership and earnings management. The study covers period of 2006 to 2010. The study used panel multiple regression as approach for the data analysis. The findings established a positive significant linked concerning family ownership and earnings management.

Bashir and Froutan (2012) attempted to study the nexus between ownership structure and earnings management of the listed companies in Iran. The sampled 31 non-family firms time span of 2002 to 2009. Multivariable regression method of analysis was used. The outcome

revealed a positive significant interaction between family ownership control and discretionary accrual. By means of a panel of 22 non-financial firm listed on Tunis Stock Exchange,

Klai and Omri (2011) observed that the power of families reduces the quality of financial information. They observe that family owners have the tendency to develop a network of relationship that align them with managers in order to pursue their personal goals to the detriment of minority shareholders interest.

In Italy, Cascino (2010) found that accounting quality is systematically related to the family firm status being different across family and nonfamily firms. Their results indicate that family firms convey financial information of higher quality than that provide by their nonfamily peers. Specifically, family firms show higher quality of accruals, more persistent, predictable, smoother and value-relevant and timely earnings, relative to nonfamily firms.

2.3 Theoretical Framework

2.3.1 Agency Theory

Agency theory provides a natural backdrop upon which this research is based. The theory states that the separation of ownership from control of the modern day business has turned the relationship between the owners (shareholders) and controllers (managers) to that of an agent and a principal. As such the managers are supposed to treat this fiduciary relationship with utmost sense of transparency and accountability. This means that they are expected to act in such a manner that benefits the shareholders rather than pursuing their own selfish interest. However, in practice, the existence of information asymmetry that gives the managers a privilege information may lead to the breach of the agency arrangement as the managers are tempted to use their positions for self enhancement, hence the agency problem.

Agency theory is defined as a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf that involves delegating some decision making authority. Jensen and Meckling (1976) essentially describes the relationship between two parties: owner as a principal and management as an agent. The theory states that the separation of ownership from control of the modern day business has turned the relationship between the owners (shareholders) and controllers (managers) to that of an agent and a principal. As such the managers are supposed to treat this fiduciary link with ultimate sense of transparency and accountability. This means that they are expected to act in such a manner that benefits the shareholders rather than pursuing their own selfish interest. However, in practice, the existence of information asymmetry that gives the managers a privilege information may lead to the breach of the agency arrangement as the managers are tempted to use their positions for self enhancement, hence the agency problem. Similarly, Fama and Jensen (1983) advocated that agency problems that arise from the separation of ownership and control could be reduced if the residual claimants (shareholders) and the decision agents (managers) in a firm are the same. This is because, the interests of shareholders and managers are closely aligned. Ownership structure involves a variety of both endogenous and exogenous corporate governance mechanisms that are put in place to mitigate this agency problem by effective monitoring of managers and consequently reduce the agency cost. For instance, internal governance mechanism presumed that, when the managers of a company also form part of the equity investors, it makes the managers to act in the best interest of the shareholders. While for external governance device, the existence of large shareholders is good for governance, because large shareholders play a more active role in monitoring and disciplining managers than small shareholders. In the same vein,

institutional ownership is good for governance, since institutional investors have stronger incentives and more resources to discipline managers than small individual investors.

The agency problems concerning managers and investors could be lower in family firms. This is because in family firms, the family usually owns a significant portion of the firm's equity and often maintains control over the management. To Habib (2005), in a firm with diffuse ownership structure and low level of a managerial shareholding, the managers might try to present the operating result of the firm in the most favourable manner possible in order to avoid shareholder unrest, or to lessen the probability of takeover attempts. In contrast, in a firm with more concentrated ownership, the managers do not need earnings manipulation as a job-preserving strategy, because the owners possess control of the firm. Therefore, less earnings manipulation, or higher earnings quality could be expected in family-owned firms, relative to firms with diffuse ownership structure. Conferring to Chen, et al. (2008) concentrated ownership also reduces the attention toward stock market fluctuations in the short term and lowers market pressures caused by meeting or beating analyst forecasts. As the managers' incentives to report accounting information that deviates from the underlying economic performance is reduced, financial reporting quality of firms with concentrated ownership should therefore increase (Warfield, Wild, and Wild, 1995).

Nevertheless, it is also argued that agency conflicts in family firms do not lie among the owners and managers, but between the controlling family and minority shareholders. Morck, Shleifer, and Vishny (1988) documented that when a firm has an entrenched dominant shareholder, there is the potential that agency conflicts with minority shareholders would arise. Family influence exists when family members own a significant portion of the firm's equity and/or family members hold positions as directors on the firm's board. With the power to control the board and

influence managerial decisions, the family has the potential to make decisions that are not in the best interests of the minority shareholders. In this case, the existence of family could lead to lower earnings quality.

More so, Fama and Jensen (1983). Shleifer and Vishny (1986) noted that strong corporate governance within a firm would moderate the problem of information asymmetry and reduce agency costs through the alignment of interests between the managers and shareholders. Therefore, higher earnings quality could be expected in firms with stronger ownership structure.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The study adopted Ex- post facto research methods for the purpose of addressing the research problem. It is commonly used in studies that investigate possible cause-and-effect relationships by observing a condition and searching back in time for plausible causal factors. In the case of this study, the study examined the impact of independent variables- Ownership structure on the dependent variable- earnings quality after the event under investigation has taken place.

3.2 Population, Sample and Sampling Techniques

The population of the study comprised all the twenty-three (23) listed firms on the Nigerian Stock Exchange as at 2017. The study used purposive sampling technique to obtain a sample size. From the population of 23 firms as in table 3.1, two (2) firms; Jos International Breweries, and Golden Guinea Breweries were not on the NSE listing for some years, while six (6) firms; DN Tyre & Rubber Plc, Mcnichols Plc, UTC Nigeria plc, Unilevel Nigeria plc, Union Dicon salt and MultiTrex Food plc have their data incomplete, these are filtered out and 15 firms emerge as a new population and the sample of the study.

Table 3.1 Population of the Study

S/N	Name	Year of Listing
1	Champion Brewery Plc	1983
2	Golden Guinea Brewery Plc	1979
3	Guinness Nigeria Plc	1965
4	International Brewery Plc	1995
5	DN Tyre & Rubber Plc	2001
6	Nigerian Breweries Plc	1973
7	Nigerian Enamelware Plc	1979

8	7 Up Bottling Company Plc	1986
9	Vita Foam Nigeria Plc	2007
10	Dangote Sugar Refinery Plc	2006
11	Flour Mills Nigeria Plc	1979
12	Honeywell Flour Mill Plc	2006
13	P. Z. Cussons Nigeria Plc	1974
14	Multi – Trex Integrated Foods Plc	2010
15	Nascon Allied Industries Plc	1992
16	Northern Nigeria Flour Mills Plc	1978
17	Dangote Flour Mills Plc	2008
18	Union Dicon Salt Plc	1993
19	U.T.C. Nigeria Plc	1972
20	McNichols Plc	2009
21	Unilever Nigeria Plc	1973
22	Cadbury Nigeria Plc	1979
23	Nestle Nigeria Plc	1976

Source: N.S.E. website

Table 3.2 Sample Size of the Study

S/N	Name	Year of Listing
1	Champion Brewery Plc	1983
2	Guinness Nigeria Plc	1965
3	Nigerian Breweries Plc	1973
4	Nigerian Enamelware Plc	1979
5	7 Up Bottling Company Plc	1986
6	Vita Foam Nigeria Plc	2007
7	Dangote Sugar Refinery Plc	2006
8	Dangote Flour Mills Nigeria Plc	1979
9	Honeywell Flour Mill Plc	2006
10	P. Z. Cussons Nigeria Plc	1974
11	Nascon Allied Industries Plc	1992
12	Northern Nigeria Flour Mills Plc	1978
13	INTERNATIONAL BREWERIES PLC	2008
14	Cadbury Nigeria Plc	1979
15	Nestle Nigeria Plc	1976

Source: N.S.E. website

3.3 Method of Data Collection

The study used secondary source of data collection. The data were collected from the annual reports of the sampled companies for a period of ten (10) years (2008 to 2017). The firms are public limited companies listed on the Nigerian Stock Exchange. By virtue of being public limited companies and as a requirement of being listed, annual financial report has to be made available to the Nigerian Stock Exchange.

3.4 Techniques of Data Analysis and Model Specification

The study employed multiple regression as the procedure of analysis with aid of STATA version 13 as a tool for analysis. The data for the study is panel in nature (that is cross-sectional time series data). In order to check for endogeneity, the study used the Hausman specification test. Additional robustness tests adopted in this research includes the test for Multicollinearity using the Variance Inflation Factor (VIF) and the Breusch-Pagan test for heteroscedasticity, to check for the fitness of model and reliability of findings

Model Specification and Variable Measurement

The essence of the model is to study the impact of ownership structure on reported earnings quality of listed consumer goods firms in Nigeria. Therefore, statistical analysis for this study has its root in agency theory. Hence, the model is stated as follows:

$$EQ_{it} = \beta_{it0} + \beta_{1it}MO_{it} + \beta_{2it}IO_{it} + \beta_{3it}OC_{it} + \beta_{4it}FO_{it} + \beta_{5it}ROA_{it} + \beta_{5it}FS_{it} + \varepsilon_{it}$$

Where:

EQ_{it} = Earnings Quality of firm i in year t

b0 = intercept (constant)

MOit= Managerial Ownership of firm i in year t

IOit= Institutional Ownership of firm i in year t

OCit= Ownership Concentration of firm i in year t

FMit= Family Ownership of firm i in year t

ROAit= Return on Asset of firm i in year t

FSit = firm Size of firm i in year t

ε = Error term

i= firm

t=time

Dependent variable

Consistent with Kothari et al., (2005), the Performance Adjusted Current Discretionary Accrual (PACDA) is used as follows:

$$\frac{ACCR_{it}}{TA_{it-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it} - \Delta AR_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 ROA_{it} + \varepsilon_{it} \quad (1)$$

Where;

ACCR it: Accruals for firm i in year t,

TAit: Total assets for firm ia t end year t-1,

ΔREV_{it} : Revenues in year t less revenues in year t-1 for firm I, ΔAR_{it} : Changes in accounts receivable,

PPEit : Gross Property, Plant, and Equipment; Property for firm i at end year t,

ROA_{it}: Return On Assets,

ϵ_{it} : Error term for firm j in year t.

The measure of discretionary accruals (DAcc) is the residual of equation (1), It is the difference between actual total accruals (ACCR) deflated by total assets (TA_{it}) and normal accruals estimated by the fitted values of equation (1). The measure of actual total accruals (ACCR) is the difference between net income before extraordinary items and operating cash flows from the statement of cash flows.

$$DAcc = \frac{ACCR_{it}}{TA_{it-1}} - \left[\alpha_0 + \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it} - \Delta AR_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 ROA_{it} \right]$$

Independent Variables

Managerial Ownership (MO) is measured as the proportion of executive directors' interest in the equity shareholding of the firm.

Institutional Ownership (IO) is the ratio of equity shares of the firm held by institutional investors to the total shares outstanding.

Ownership Concentration (OC) is the proportion of shares held by certain number of block holders, exceeding 5%.

Family Ownership (FO) is the ratio of shares held by members of the same family to the total equity shares outstanding.

Control variables

Control variables were used in this study to increase the fitness of the model and to avoid omitted variables biasness. The control variables are discussed below;

Firm Size

Firm size is the natural logarithm of total assets. Prior literature finds that larger firms are likely to have higher financial reporting quality, because larger firms have more effective internal control systems and face more scrutiny from the market (Bedard, Chtourou & Courteau 2004). However, Davidson, Goodwin-Stewart and Kent (2005) find that larger firms are more likely to conduct earnings management than smaller firms to avoid reporting earnings decreases.

Profitability

This study also controls for the effect of company performance (ROA), measured by absolute net income divided by total assets, because estimated discretionary accruals are greater in companies that perform very poorly or in a very superior way. So, ROA is expected to be positively associated with earnings management (Johari Sale, Jaffar & Hassan 2008).

3.5 Justification of Methods

The choice of ex-post facto approach is that the event under study has already taken place. Thus study depended on upon historical data. In line with the objectives and hypotheses formulated the study make used of multiple regressions to determine the impact of independent variables on the dependent variable, since it is the most suitable techniques for determining the extent of impact of independent variables on dependent variable. Stata Statistical Package was also use since it allows in establishing the impact of the independent variables on the dependent variable as well as testing for robustness such as heteroscedasticity test, fixed and random effect test, Multicollinearity test the study used STATA application package to generate residuals from Kothari et al (2005) model for each year of the study. The choice of performance Adjusted

Current Discretionary Accrual model is because it is widely tested and accepted by many scholars and it is the best model to estimate discretionary accruals with minimal error.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

The data collected from the fifteen sampled firms were processed to form the different variables required for this study. This section gives an indebt analysis on the behavior of the variables. Other details of all the variables used in the study are provided in Appendix A.

4.1.1 Descriptive Statistics

The summary of the descriptive statistics of the variables are presented in table 4.1. The full result is contained in appendix II (a).

Table 4.1: Descriptive Statistics

Variables	Mean	Max	Min	SD
EQ	.1020471	.675844	.000208	.1492064
MO	.0748258	.647996	.00016	.1357931
IO	.2552751	.591556	.002352	.1592901
OC	.5468211	.862508	.112639	.2026345
FO	.1116889	.724036	0	.2204028
ROA	.1554867	.554863	-.82145	.1998872
FS	5.197167	11.8296	2.12345	1.4962

Source: STATA Output

The results in Table 4.1 indicates that the measure of reported earnings quality (EQ), which is the inverse of absolute discretionary accruals of the sampled consumer firms has an average value of

.1020471 (10%) with standard deviation of .1492063 (15%) respectively. The difference between the mean of EQ and standard deviation of across the firms is 15% This indicates a high variability around the mean. The table also showed that the minimum and maximum EQ are .000208 (0.002%) and .675844 (67%) respectively, implying a very wide range. This signified that that earnings quality is very high in some years than in other years.

More so, from Table 4. 1 above, the average managerial ownership of the quoted consumer goods firms that constitute the study sample is .07%, institutional shareholding accounts for 25% while ownership concentration and family ownership account for 54% and 11% respectively. The minimum value for managerial ownership is 0.01% and the maximum value is 64%. The proportion of managerial ownership represents a relatively negligible amount of the total shares outstanding (less than 1). Whereas institutional ownership has a minimum value of .002% and a maximum value of 59%, the minimum value indicating that there was a particular firm in a certain year within the observations that have 2% institutional investors. for ownership concentration as the minimum value of 11% and 86% respectively. Similarly, family ownership has minimum value of 0 and maximum value of 72% respectively. However, a large amount of equity ownership is concentrated in the hands of both institutional investors and individuals that have the same family affiliations, both accounting for as high as and respectively.

The control variable (Profitability) also shows that the mean profitability as indicated by the mean is .1554867, indicating 15% average return on asset, while the standard deviation is .19% representing the wide variability of return on total asset among the sampled firms within the period covered by the study. This implies that the level of profitability among the firms is widely spread. Some firms tend to record relatively higher level of profitability than others do. The

minimum and the maximum as shown by the tables are -.82% and .55%. Hence, the range is 55% implying that there is very wide gap between the highest profit and lowest loss.

The average firm size (control variable) is N5.19 billion Naira, which is a wide disparity from the standard deviation of 1.49 billion Naira. The minimum and the maximum firm size are 2.12 billion Naira and 11.82 billion Naira respectively. This indicates that the consumer good firms in Nigeria vary significantly among each other in terms of size.

4.2 Data Analysis and Results

4.2.1 Correlation Matrix

The correlation matrix shows the relationship between each two pairs of variable in the regression model, the level of correlation between the variables is very important because excessive correlation may distort the standard error of estimation and lead to a wrong conclusion (Ahmad, 2014). The correlation matrix also serves as a preliminary test for Multicollinearity. However, in this study, further test of Multicollinearity was conducted through variance inflation factor (VIF) and Tolerance Value (TV).

Table 4.2 Correlation Matrix of Dependent and Independent Variables

Variables	EQ	MO	IO	OC	ROA	FS
EQ	1.0000					
MO	-0.0067	1.0000				
IO	0.1315	-0.1523	1.0000			
OC	0.1109	0.3024	0.2197	1.0000		
FO	0.0215	0.17566	-0.2589	0.2615	1.0000	
ROA	0.5091	-0.0279	0.0851	-0.0999	-0.0510	1.0000
FS	-0.0643	-0.0418	0.1980	0.1423	-0.1763	0.1491

Source: output of correlation matrix obtained from STATA

The correlation matrix shows the association between each pair of variables. The relationship between each independent variable and the dependent variable are expected to be strong while the relationship between each pair of independent variable is expected to be low. This is because, according to Gujarati and porter (2009), a correlation coefficient between two independent variables above ± 0.8 is considered excessive and may indicate the existence of Multicollinearity. However, Table 4.2 shows that all the correlation coefficient between the pairs of the independent variables is less than 0.8, thus, suggesting that the six independent variables can be well fitted into one regression model.

The correlation matrix table revealed that the correlation coefficient between earnings quality and managerial ownership is -0.0067. The result indicates that managerial ownership has a negative relationship with earning quality of consumer goods firm in Nigeria.

The correlation matrix also shows that the correlation coefficient between earnings quality and institutional ownership is 0.13%. This implies that there is positive relationship between institutional ownership and earnings quality of consumer goods firms in Nigeria. The result suggests that as institutional ownership increases the amount of discretionary accrual decreases, thus, the higher the institutional ownership, the higher and the earnings quality and vice versa.

Table 4.2 shows that the correlation coefficient between ownership concentration and earnings quality is 0.11%. The result means that ownership concentration has a positive relationship with earnings quality of consumer good firms in Nigeria. It implies that an increase in ownership concentration will result in increase in earnings quality of consumer goods firms and vice versa.

Table 4.2 further revealed that the correlation coefficient between the earnings quality and family ownership is 0.02% This means that family ownership has a positive relationship with earnings quality of consumer goods firm in Nigeria. The result implies that as family ownership increases earnings quality increases. Hence, increase in family ownership will result in an increase in earnings quality.

The correlation matrix also shows that the correlation coefficient between earnings quality and profitability is 0.50%. This implies that there is positive relationship between profitability and earnings quality of consumer goods firms in Nigeria. The result suggests that the higher the profitability, the higher and the earnings quality and vice versa.

Finally, the correlation matrix showed that the coefficient of correlation between earnings quality and firm size is -0.06% The result implies that firms has a negative relationship with earnings quality of consumer goods firms in Nigeria. Similarly, the larger a firms are, (in terms of its total asset) the higher its earnings quality.

4.2.2 Regression Diagnostic

The two diagnostics tests conducted in this study are Multicollinearity and heteroscedasticity tests. These tests are important to regression estimation in order to satisfy the assumptions of the Ordinary Least Square (OLS) of homoscedasticity and absence of exact correlations among the independent variables in the model.

4.2.1.1 Multicollinearity Test

Multicollinearity test is conducted to check the presence of harmful correlation between the explanatory variables that could distort the regression result. In this study, Multicollinearity test was conducted using Variance Inflation Factor (VIF) and Tolerance Value (TV). According to Gujarati (2004), when VIF value is more than 10 and/or when the tolerance value is less than 0.1 then there is a strong indication of the presence of Multicollinearity.

Table 4.3: VIF Test for Multicollinearity

Variable	VIF	1/VIF
MO	2.44	0.410377
IS	1.21	0.827585
OC	1.26	0.790521
FO	2.61	0.383514
ROA	1.05	0.954342
FS	1.13	0.887705
Mean VIF	1.62	

Source: output from STATA

The test for Multicollinearity using the variance inflation factor (VIF) reveals the absence of it as all factors are below 10 and tolerance values are less than 1.0. The mean VIF is 1.62. The result means that there is no evidence of Multicollinearity among the explanatory variables.

4.2.1.2 Heteroscedasticity Test

Heteroscedasticity test is conducted to check the homoscedasticity assumption of the regression model. The presence of heteroscedasticity violates the homoscedasticity assumption and may lead to a wrong inference.

Table 4.4: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

chi2(1) =	0.76
Prob > chi2 =	0.4137

Source: output from STATA

In this study, heteroscedasticity test was conducted using Breusch- Pagan/Cook-Weisberg test. The result of Breusch- pagan / Cook-Weisbaerg test for the study shows that the chi2 value is 0.76 and the p-value of chi2 is 0.4137 indicating the absence of heteroscedasticity

4.2.1.3 Hausman Speciation Test

Because of the homogeneity of data used in this study, which assumes that fixed effects and random effects models are similar, Hausman test is performed to determine which of the two models is more efficient.

Table 4.5: Hausman speciation test

Variables	Fixed effect	Random Effect	Differences
MO	.4819925	-.1257307	.6077231
IS	-.3518878	.1555766	-.5074644
OC	.4272136	.3363618	.0908518
FO	-1.773525	.0363165	-1.809841
ROA	.3219836	.312751	.0092325
FS	-.2709657	-.2075899	-.0633758
chi2(6) = 3.08			
Prob>chi2 = 0.7984			

Source: output from STATA

The Hausman speciation test was conducted to choose between the fixed and random effect model. The result of the Hausman test revealed that the value of chi2 is 3.08 and the prob>chi 0.7984. The insignificant value as reported by the probability of chi2 indicates that the Hausman test is in favor of random effect model.

Table 4.6 Random Effect Model

EQ	Coefficient	T	p-value
MO	-1257307	-0.37	0.709
IO	0.0958651	2.03	0.048
OC	.3363618	2.02	0.043
FO	.0363165	0.17	0.864
ROA	.312751	7.19	0.000
FS	-.2075899	-2.36	0.019
_cons	.6367498	1.60	0.109
R-Square	0.3218		
Wald Test	56.93		
Prob. of chi2	0.0000		

Source: output from STATA

The R-square value showed the level at which the explanatory variables explain the dependent variable., The result of R^2 of 32% signifies that of total variation in earnings quality is caused by managerial ownership, institutional ownership, ownership concentration, family ownership, profitability and firm size of quoted consumer goods firms in Nigeria. The value of F - statistic is 56.93 with probability of $\chi^2 = 0.000$. The probability of χ^2 is significant at 5%, indicating that the model is fit. This serves as a substantial evidence to conclude that the ownership structure variables selected for the study are suitable for the study of the impact ownership structure on earnings quality of consumer goods firms in Nigeria.

From the table the result shows that managerial ownership has negative effect on earnings quality and insignificant at 5% with coefficient of $-.1257307$, t-statistics of -0.37 and p-value of 0.709 . This implies that for every 1% increase in managerial ownership, there is a consequent 12% decrease in earnings quality holding all other variables constant. Therefore, hypothesis one is not rejected.

The coefficient for institutional ownership reveals a positive significant effect on earnings quality. It shows a coefficient of $.0958651$ and z-value of 2.03 and p-value of 0.048 . The implication is that for every 1% increase in institutional ownership, the earnings quality increase by 9%. This implies that institutional ownership has positive significant effect on earnings quality of listed consumer goods firms in Nigeria. Thus, the study rejected the null hypothesis two which stated that institutional ownership has no significant effect on earnings quality of listed consumer goods firms in Nigeria.

The coefficient for ownership concentration reveals a significant positive effect on earnings quality since the coefficient is $.3363618$, z-value is 2.02 and p-value is 0.043 . This implies that for every 1% increase in ownership concentration there is a resulting 33% increase in earnings quality. By implication, ownership concentration increase with increase in earnings quality of listed consumer goods firms in Nigeria. This provides a basis for rejecting the null hypothesis three which stated that ownership concentration has no significant effect on earnings quality of listed consumer goods firms in Nigeria.

Furthermore, the coefficient for family ownership reveals a positive insignificant effect on earnings quality. It shows a coefficient of $.0363165$ and z-value of 0.17 and p-value of 0.864 . The effect is that for every 1% increase in family ownership, the earnings quality increases by

3%. Therefore, the study accepted the null hypothesis four which stated that family ownership has no significant effect on earnings quality of listed consumer goods firms in Nigeria.

4.3 Discussion of Findings

In this section, major findings from the results of the study are presented and discussed. For clarity of presentation and ease of understanding, the discussions of the findings have been divided into four sections with each section focused on one independent variable and the dependent variable.

4.3.1 Managerial Ownership and Earnings Quality

The study found that managerial ownership has negative insignificant statistical impact on the quality of earnings of listed consumer goods sector suggesting that the managerial ownership does not enhancing earnings quality of listed consumer goods firm for the period of the study. It therefore suggests that, having the managers among the shareholder's decreases earnings quality; This finding supports those of , Jo-Lan and Ching-Chieh, (2015), Imad, (2015), Hashim and Devi (2008), Tsai and Lin (2003), who revealed that managerial ownership has negative effect on earnings quality. Suggesting that an increases in managerial ownership does not enhance the reported earnings predicted by the agency theory.

The finding, however, contradicts the findings of Waidi and Johnson, (2016), Amah, Michael and John, (2016), Isenmila and Elijah (2012) who found a positive significant concerning managerial ownership and earnings quality.

4.3.2 Institutional Ownership and Earnings Quality

This study found a positive significant impact of institutional ownership on reported earnings quality of listed consumer goods firms in Nigeria. This indicates that an increase in IO provides better monitoring of firm's activities which in turn leads to better performance and less expropriation of the shareholder's fund. So the institutional ownership also has financial expertise that enables them to detect the opportunistic behaviours of managers. It can therefore be established that large institutional presence in the Nigerian consumer goods firms helps to allay the agency problem and leads to the protection of minority shareholders interest which reduces drastically the level of managing earnings and improves the reported earnings quality. Similarly the involvement of institutional investors' participation not only improving corporate governance practices but also contributes to the higher quality of reporting earnings in consumer goods firms in Nigeria. This finding is consistent with the agency theory. The finding is also in line with the findings of Salisu, Bashir, Abubakar and Aliyu,(2016), Laith, (2015), Red, hwanand and Ku, (2013), Shehu (2011), Al-Fayoumi, Abuzayed and Alexander (2010), Hashim and Devi (2006) and contradict the findings of Janeth and Cosmas, (2016), Eman and brahim,(2015), Shaikh, Iqbal, Shah and Bhutto (2012).

4.3.3 Ownership Concentration and Earnings Quality

Considering the impact of ownership concentration on reported earnings quality, the result reveals that ownership concentration is positively and significantly associated with reported earnings quality of listed consumer goods firms in Nigeria. The result is consistent with agency theory. Large shareholders play an active role in curbing the agency problem because they have a general interest in profit maximization and enough control over the asset of the firm. In fact, large acquisition of equity shares by few individuals in Nigerian consumer goods firms that form

this study sample increases the earnings quality of the firm. This is because the cost implication of the monitoring is less than the expected benefit from their huge investments. This finding supports that of Zhizhong and Qingmei, (2016), Alimehmeti and Paletta (2011), and contradict the findings of Klai and Omri (2011).

4.3.4 Family Ownership and Earnings Quality

Interestingly, this study also found a positive impact of family ownership on reported earnings quality. These results suggest that family ownership supply accounting information of higher quality, as they have lower discretionary accruals, and this behavior implies that the reduction in Type I agency conflicts overshadow the potential increased Type II agency conflicts. Special characteristics possessed by family firms such as altruism and long-term orientation may contribute to better monitoring in these firms, resulting in higher quality of earnings. The study result is consistent with the findings of Tim, (2013), Sa'adiyah and Romlah, (2013) Hümeyra, (2013) who documented a positive interaction between family ownership and earnings quality. It also conforms with the conclusion of Klai and Omri (2011) who establish a negative impact of family ownership and earnings quality. However, this finding is in conflict with that of Hashim and Devi (2008).

The control variable-ROA has a significant positive impact on earnings quality of listed consumer goods firms in Nigeria. The t-value of 7.19 and the probability value of 0.0000 suggest the positive impact. This means that managers of the firms are more incline to manage earnings when performance is high. The finding is in line with those of Johari Sale, Jaffar and Hassan (2008)

The second control variable is firm size. The impact of firm size on discretionary accrual of listed consumer goods firms in Nigeria is negative, but statistically significant because t-value is -2.36 with a probability value of 0.019. It therefore implies that because bigger firms are closely watched, they may not be able to manipulate financial statement. The findings is in line with the findings of Bedard et al. (2004) and contradicted the findings of Davidson et al. (2005) find that larger firms are more likely to conduct earnings management than smaller firms to avoid reporting earnings decreases.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study was carried out to studied the impact of ownership structure on reported earnings quality of listed consumer goods firms in Nigerian. The specific objectives include: to examine the impact of managerial ownership on reported earnings quality of consumer goods firm in Nigeria, to examine the impact of institutional ownership on the reported earnings quality of consumer goods firms in Nigeria, to examine the impact of ownership concentration on reported earnings quality of listed consumer goods firms in Nigeria and to evaluate the impact of family ownership on reported earnings quality of listed consumer goods firm in Nigeria.

To enhance the understanding of the subject matter, the concept of ownership structure (managerial ownership, institutional ownership, ownership concentration and family ownership) and reported earnings quality are discussed. Also, relevant empirical literatures were reviewed to identify gaps and establish a theoretical backing. Based on the network of hypothesis in the study, Agency theory was used to underpin the study. The agency theory advocates that the owners/shareholders are separate from managers in such a way that directors and institutional shareholders acts as monitoring tool of checkmating opportunistic behaviours of managers in preparing financial statement.

The sample size of the study is fifteen (15) out of twenty-three (23) firms. Ex post factors research design was used. This is because the study tried to established a possible cause and effect relationship between of ownership structure on earnings quality using historical data. The data collected was purely from secondary sources; extracted from the companies' annual reports

and other corporate websites. A multiple regression technique was employed to assess the impact of ownership structure on reported earnings quality. The regression was run in a panel manner; in which random effect was selected based on the Hausman specification test.

The study found that ownership structure has significant impact on reported earnings quality of listed consumer goods firms in Nigeria. Individual results showed that managerial ownership has negative impact of reported earnings quality on of listed consumer goods firm in Nigeria. while institutional ownership, ownership concentration and family ownership has positive impact on reported earnings quality of listed consumer goods firms in Nigeria. Lastly, the control variable, ROA was found to have significant positive impact on reported earnings quality, while firm size was statistically significant in influencing the level of earnings quality of listed consumer goods firms in Nigeria.

5.2 Conclusion

Agency theory demands that managers should act in a manner that is consistent with the value maximization objective of the firm. However, in practice, the positions that they hold triggers information asymmetry which induces the managers to pursue their own interest at the expense of the firms that they manage. One of the strategies through which managers seek selfish gains is through the exploitation of accounting methods and choices within the regulatory framework. The study therefore, concluded that ownership structure has a significant impact on reported earnings quality of listed consumer goods firms in Nigeria. Specifically, the study concluded that managerial ownership has negative insignificant impact on reported earnings quality of listed consumer's goods firms in Nigeria. That is managerial ownership is not a significant determinant of reported earnings quality of listed consumer's goods firms in Nigeria.

Similarly, the study concludes that, institutional ownership has a positive significant impact on reported earnings quality of listed consumer goods firms in Nigeria. Increasing in the institutional investors' shareholdings have a positive role in determining the quality of earnings of consumer goods firms in Nigeria. The effect of this is that, the higher the institutional ownership the better performance and this would reduce manipulation of shareholders' funds. The study also concludes that ownership concentration has a positive impact on reported earnings quality of listed consumer goods firms in Nigeria. Ownership concentration affect the informational quality of earnings positively, and consequently enhance the quality of reported earnings of listed consumer goods firm in Nigeria. However, the study concludes that, family ownership has positive insignificant impact on reported earnings quality of listed consumer goods firms in Nigeria during the period under review. The involvement of family investors' participation not only improving corporate governance practices but also contributes to the higher quality of accounting information of listed consumer goods firms in Nigeria.

5.3 Recommendations

In line with the findings and conclusions of this study, the following recommendations are offered:

- i. The study recommends that fewer amounts of equity shares should be held by the managers of the consumer goods firms in Nigeria. This is because the findings of this study revealed a negative insignificant relationship between managerial ownership and reported earnings quality.
- ii. The study recommends that institutional shareholding should be encouraged by monitoring authorities such as Security and Exchange Commission (SEC) because of the role the plays in restraining managers to act in a manner that favors the firm.

- iii. The study also recommends that there should be a sparse distribution of equity shareholding among available shareholders in order to prevent the likely expropriation of minority interest by the lion shareholders.
- iv. The management should consider that family firms have dominant contributions in the development of the Nigerian economy. This study also recommends to support the call to address an introduction of corporate governance system that are more appropriate for the firms with different ownership structure in the country.

5.4 Limitations of the Study

The generalization of the findings of this study is limited to consumer goods companies listed on the floor of Nigerian stock exchange market. This is because other firms have their own peculiarities that may render the findings from the study not relevant to them. Moreover, the study is restricted to only ownership structure variables examined in this study, Therefore, it is suggested that further studies in this area should focus on Foreign Ownership, State Ownership in their Ownership Structure. This study made use Kothari et al., (2005), the performance Adjusted Current Discretionary Accrual as a proxy for earnings quality. Therefore, the study suggests that further studies in this area should make use of more than one earnings quality properties such accrual quality, earnings persistence, real earnings management. Another limitation of this study is that the study used quantitative methodology, complimenting a survey of opinions from the stakeholders about the ownership structure and reported earnings quality could have increase the robustness of the results and findings.

5.5 Suggestions for Further Research

This study examined the impact of managerial ownership, institutional ownership, ownership concentration and family ownership on earnings quality of listed consumer goods firms for the period 2008 to 2017. The period of the study can be extended to 2018; there are other ownership structure variables that were not captured in this study. All these need to be revisited to capture some changes that might have occurred.

The same ownership structure variables used in this study can be examined in another domain/sector to see whether or not the research findings would be similar.

Further research is needed on the impact of ownership structure on earnings quality properties.

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Appendix

Data of the Variables Used

firms	Eq	mo	ls	oc	fo	roa	fs
7up	0.242694	0.047846	0.376153	0.655826		0 0.093331	7.85433
7up	0.674151	0.047846	0.376153	0.655826		0 0.019151	7.81742
7up	0.216899	0.048627	0.382292	0.66653		0 0.210669	6.82467
7 up	0.006346	0.048627	0.382292	0.66653		0 0.058261	7.82958
7 up	0.023914	0.048627	0.394008	0.66653		0 0.034609	8.98765
7 up	0.034015	0.033491	0.313566	0.609794		0 0.055597	8.98765
7 up	0.01416	0.033491	0.313566	0.609794		0 0.115175	7.52984
7 up	0.485584	0.033491	0.313566	0.609794		0 0.017182	7.7765
7 up	0.569968	0.033491	0.313566	0.609794		0 0.025046	7.23468
7up	0.441405	0.033491	0.313566	0.609794		0 0.081437	7.7654
cubdury	0.317768	0.040558	0.198157	0.748444		0 0.049263	6.1214
cubdury	0.131652	0.040558	0.198157	0.748444		0 0.04988	7.09874
cubdury	0.072533	0.040558	0.198157	0.748444		0 0.139512	5.88765
cubdury	0.048285	0.040558	0.198157	0.748444		0 0.065198	5.6654
cubdury	0.002264	0.040557	0.198153	0.748429		0 0.040574	7.77654
cubdury	0.119219	0.044757	0.202251	0.748645		0 0.036383	6.87665
cubdury	0.049698	0.044747	0.202207	0.748482		0 0.309426	6.8876
cubdury	0.028682	0.647996	0.17778	0.759996		0 0.049922	6.44457
cubdury	0.198452	0.647996	0.17778	0.759996		0 0.196099	7.76543
cubdury	0.057719	0.647996	0.17778	0.759996		0 0.115374	5.7654
dangote flour mills	0.039312	0.647996	0.17778	0.759996	0.724036	0.113917	5.77652
dangote flour mills	0.187336	0.647996	0.17778	0.759996	0.724036	0.11375	4.6544
dangote flour mills	0.675844	0.504428	0.202495	0.862508	0.724036	0.020719	5.13446
dangote flour mills	0.027889	0.504428	0.202495	0.862508	0.724036	0.40833	4.87654
dangote flour mills	0.110109	0.504428	0.202495	0.862508	0.724036	0.025351	4.76654
dangote flour mills	0.112618	0.504428	0.202495	0.862508	0.688171	0.148631	4.77226
dangote flour mills	0.099381	0.404591	0.162417	0.791699	0.688171	0.129769	4.7767
dangote flour mills	0.086497	0.142741	0.177344	0.651727	0.688171	0.069556	4.37162
dangote flour mills	0.124814	0.087232	0.002352	0.651727	0.688171	0.091609	10.8174
dangote flour mills	0.066998	0.087232	0.002352	0.651727	0.551968	0.016786	10.8247
dangote suger plc	0.297964	0.087232	0.002352	0.535068	0.654486	0.013035	11.8296
dangote suger plc	0.066791	0.087232	0.002352	0.535068	0.633288	0.022209	7.9876
dangote suger plc	0.081745	0.087232	0.002362	0.535068	0.633288	0.06639	7.9876
dangote suger plc	0.212386	0.087232	0.002518	0.535068	0.633288	0.080666	7.5298
dangote suger plc	0.01384	0.087232	0.003876	0.615917	0.633288	0.140936	8.7765
dangote suger plc	0.002862	0.014821	0.177184	0.615917	0.633288	0.396596	7.2347
dangote suger plc	0.070919	0.014821	0.177184	0.615917	0.633288	0.333706	8.7654
dangote suger plc	0.002499	0.014821	0.161949	0.583407	0.633288	0.275692	4.48532

dangote suger plc	0.211426	0.043131	0.481885	0.583407	0.167585	0.180561	4.54238
dangote suger plc	0.041529	0.043131	0.481885	0.583407	0.167585	0.247171	4.58843
northern flour mills of Nig plc	0.281273	0.043131	0.481885	0.583743	0.167585	0	4.77717
northern flour mills of Nig plc	0.115003	0.043156	0.482162	0.414038	0.171064	0	4.80678
northern flour mills of Nig plc	0.222274	0.043156	0.482162	0.414038	0.171064	0	4.80678
northern flour mills of Nig plc	0.014416	0.043156	0.42292	0.414038	0.171064	0	4.89147
northern flour mills of Nig plc	0.096116	0.043156	0.42292	0.414038	0.171163	0	4.91619
northern flour mills of Nig plc	0.336642	0.062772	0.42292	0.546655	0.263474	0	4.93265
northern flour mills of Nig plc	0.122271	0.050004	0.336899	0.546655	0.263474	0	4.03451
northern flour mills of Nig plc	0.33994	0.050004	0.336899	0.546655	0.263474	0	4.53288
northern flour mills of Nig plc	0.586973	0.050004	0.336899	0.546655	0.263474	0	4.52569
northern flour mills of Nig plc	0.06449	0.050004	0.336899	0.546655	0.277342	0	4.5534
NASCON	0.13587	0.050004	0.336899	0.546655	0.277342	0.195619	4.48456
NASCON	0.374045	0.061054	0.336899	0.587029	0.216625	0.232331	4.44444
NASCON	0.592542	0.025222	0.558155	0.587029	0.216625	0.184508	4.82837
NASCON	0.187805	0.025222	0.558155	0.587029	0.216625	0.145103	4.90695
NASCON	0.044254	0.025222	0.558155	0.587029	0.216625	0.140029	4.4787
NASCON	0.053004	0.025222	0.558155	0.587029	0.216625	0.21834	4.78808
NASCON	0.064714	0.025222	0.558155	0.837858	0.21231	0.023751	4.63038
NASCON	0.056307	0.025222	0.558155	0.837858	0.216625	0.205638	4.57512
NASCON	0.077671	0.025222	0.558155	0.837858	0.216625	0.209598	4.47507
NASCON	0.047134	0.025222	0.558155	0.837858	0.216625	0.19906	4.36322
Nestle Nig Plc	0.070201	0.025222	0.558155	0.837858	0	0.467272	4.61561
Nestle Nig Plc	0.085245	0.025222	0.558155	0.432766	0	0.463835	4.64113
Nestle Nig Plc	0.03799	0.04502	0.179903	0.432766	0	0.40148	4.36922
Nestle Nig Plc	0.25772	0.04502	0.179903	0.432766	0	0.064617	4.64983
Nestle Nig Plc	0.025836	0.04502	0.179903	0.432766	0	0.062124	4.3293
Nestle Nig Plc	0.653147	0.04502	0.179903	0.432766	0	0.071494	4.43409
Nestle Nig Plc	0.021179	0.04502	0.179903	0.328954	0	0.187289	4.02881
Nestle Nig Plc	0.158273	0.058115	0.136747	0.328954	0	0.049782	4.01347
Nestle Nig Plc	0.004666	0.058115	0.136747	0.589908	0	0.019584	4.97706
Nestle Nig Plc	0.199634	0.036059	0.112031	0.589908	0	0.216101	4.99116
champion	0.000208	0.036059	0.112031	0.589908	0	0.141833	4.22973
champion	0.032426	0.036059	0.112031	0.589908	0	0.139846	4.21227
champion	0.058763	0.036059	0.112031	0.589799	0	0.13669	2.57775
champion	0.059919	0.105613	0.112011	0.589799	0	0.120522	2.12345

champion	0.059378	0.105613	0.127533	0.589799	0	0.418744	3.3345
champion	0.592233	0.105613	0.127533	0.589799	0	0.554863	4.27662
champion	0.327975	0.105613	0.127533	0.589799	0	0.49663	4.41206
champion	0.28914	0.105613	0.127533	0.589799	0	0.372488	4.47992
champion	0.187967	0.00016	0.127533	0.285114	0	0.281661	4.52132
champion	0.045929	0.069762	0.283659	0.285114	0	0.12075	4.48961
vitafoam	0.005205	0.069762	0.283659	0.285114	0	0.054757	4.53476
vitafoam	0.021464	0.069762	0.283659	0.285114	0	0.068462	4.46307
vitafoam	0.026787	0.069762	0.283659	0.456054	0	0.056809	3.89697
vitafoam	0.021788	0.039286	0.453728	0.456054	0	0.458626	3.94285
vitafoam	0.021549	0.039286	0.591556	0.457565	0	-0.03881	4.03647
vitafoam	0.012085	0.039286	0.591556	0.457565	0	-0.03842	4.58841
vitafoam	0.10975	0.039286	0.591556	0.457565	0	0.088563	4.12756
vitafoam	0.031309	0.039286	0.591556	0.457565	0	0.081481	4.03491
vitafoam	0.02865	0.039286	0.591556	0.678203	0	0.077199	4.05115
vitafoam	0.027021	0.010427	0.151976	0.678203	0	0.43458	4.20892
PZ	0.157329	0.010427	0.151976	0.678203	0	0.081248	4.27818
PZ	0.01904	0.010427	0.151976	0.678203	0	-0.05478	4.33554
PZ	0.040714	0.010427	0.109117	0.678203	0	0.056658	4.71384
PZ	0.03801	0.010427	0.109117	0.678203	0	0.060632	4.80152
PZ	0.052719	0.010427	0.109117	0.678203	0	-1.25222	4.81815
PZ	0.001122	0.010493	0.109117	0.576474	0	-0.05776	4.99105
PZ	0.065749	0.008919	0.09275	0.576474	0	0.02092	4.06707
PZ	0.021904	0.008919	0.09275	0.576474	0	0.165216	4.12411
PZ	0.007816	0.008919	0.09275	0.714506	0	0.019788	4.12411
PZ	0.021872	0.008919	0.462577	0.714506	0	-0.11046	4.17975
Honeywell Flour Mill Plc	0.00851	0.008919	0.462577	0.784016	0	-0.12245	4.25986
Honeywell Flour Mill Plc	0.001362	0.009787	0.507578	0.784016	0	0.032314	4.78368
Honeywell Flour Mill Plc	0.036336	0.009787	0.507578	0.784016	0	0.04034	4.0566
Honeywell Flour Mill Plc	0.026576	0.009929	0.545055	0.784016	0	0.162795	4.5537
Honeywell Flour Mill Plc	0.00327	0.009929	0.384486	0.784016	0	0.43905	4.9908
Honeywell Flour Mill Plc	0.003237	0.009929	0.384486	0.668642	0	0.493452	4.91139
Honeywell Flour Mill Plc	0.009906	0.016425	0.370415	0.668642	0	0.637598	4.91233
Honeywell Flour Mill Plc	0.00335	0.016425	0.370415	0.668642	0	-1.47149	4.98852
Honeywell Flour Mill Plc	0.210809	0.016425	0.370415	0.135452	0	0.455604	4.89511
Honeywell Flour Mill Plc	0.046878	0.045222	0.223216	0.135452	0	0.369911	4.90901
GUINNESS	0.013529	0.045222	0.223216	0.135452	0	0.38917	4.91616

GUINNESS	0.002555	0.045222	0.223216	0.135452	0	0.498979	4.18156
GUINNESS	0.013362	0.045222	0.223216	0.135452	0	-0.82145	4.1898
GUINNESS	0.000556	0.045222	0.223216	0.135452	0	-0.65603	4.22466
GUINNESS	0.033339	0.045222	0.210941	0.112639	0	0.485058	4.20675
GUINNESS	0.000238	0.037605	0.175414	0.112639	0	0.84779	4.24709
GUINNESS	0.011117	0.037605	0.175414	0.112639	0	0.443323	4.81918
GUINNESS	0.057598	0.037605	0.175414	0.112639	0	0.489503	4.82951
GUINNESS	0.009894	0.037605	0.175414	0.781454	0	0.200224	4.85612
GUINNESS	0.022769	0.051379	0.294651	0.781454	0	-1.17952	4.86007
Nigerian Breweries Plc	0.021214	0.051379	0.294651	0.781454	0	0.088036	4.85269
Nigerian Breweries Plc	0.015354	0.051379	0.294651	0.781454	0	0.067949	4.86276
Nigerian Breweries Plc	0.019052	0.051379	0.2657	0.732597	0	0.064499	4.86407
Nigerian Breweries Plc	0.011547	0.051379	0.2657	0.732597	0	0.079207	4.89511
Nigerian Breweries Plc	0.010426	0.051379	0.2657	0.77431	0	0.19592	4.91033
Nigerian Breweries Plc	0.021581	0.056619	0.280828	0.568571	0	0.26156	4.92025
Nigerian Breweries Plc	0.023867	0.056619	0.140068	0.551259	0	0.141862	4.77513
Nigerian Breweries Plc	0.113382	0.027924	0.135803	0.551259	0	0.119285	4.61136
Nigerian Breweries Plc	0.04963	0.027924	0.135803	0.500602	0	0.161958	4.61643
Nigerian Breweries Plc	0.108394	0.025358	0.123324	0.500602	0	0.15341	4.65971
INTERNATIONAL BREWERIES PLC	0.042801	0.025358	0.123324	0.500602	0	0.172571	4.70754
INTERNATIONAL BREWERIES PLC	0.013236	0.025358	0.140395	0.500602	0	0.147294	4.71228
INTERNATIONAL BREWERIES PLC	0.035384	0.025358	0.140395	0.551383	0	0.279553	4.74299
INTERNATIONAL BREWERIES PLC	0.016358	0.030202	0.154637	0.551383	0	0.270771	4.78452
INTERNATIONAL BREWERIES PLC	0.037365	0.030202	0.154637	0.551383	0	0.027496	4.78603
INTERNATIONAL BREWERIES PLC	0.013362	0.030202	0.154637	0.247123	0	0.051753	4.82016
INTERNATIONAL BREWERIES PLC	0.000556	0.014009	0.105924	0.247123	0	0.069473	4.83993
INTERNATIONAL BREWERIES PLC	0.033339	0.014009	0.105924	0.247123	0	0.081509	4.95011
INTERNATIONAL BREWERIES PLC	0.000238	0.014009	0.105924	0.247123	0	0.072528	5.03888
INTERNATIONAL BREWERIES PLC	0.011117	0.014009	0.105924	0.247123	0	0.12912	5.09224
ENAMELWARE	0.057598	0.014009	0.105924	0.241336	0	0.49062	5.06618

ENAMELWARE	0.009894	0.026789	0.101646	0.241336	0	0.072963	5.08801
ENAMELWARE	0.022769	0.026789	0.140403	0.241336	0	0.063801	5.03823
ENAMELWARE	0.021214	0.026789	0.140403	0.241336	0	0.50295	5.0737
ENAMELWARE	0.015354	0.026789	0.140403	0.241336	0	0.495407	5.00848
ENAMELWARE	0.019052	0.014009	0.140403	0.241336	0	0.12912	6.01512
ENAMELWARE	0.011547	0.026789	0.101646	0.241336	0	0.49062	4.12892
ENAMELWARE	0.021214	0.026789	0.140403	0.241336	0	0.072963	4.26919
ENAMELWARE	0.015354	0.026789	0.140403	0.241336	0	0.063801	4.35453
ENAMELWARE	0.019052	0.026789	0.140403	0.2455	0	0.50295	4.32494

Appendix II: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Eq	150	.1020471	.1492064	.000208	.675844
mo	150	.0748258	.1357931	.00016	.647996
Is	150	.2552751	.1592901	.002352	.591556
oc	150	.5468211	.2026345	.112639	.862508
fo	150	.1116889	.2204028	0	.724036
roa	150	.1241777	.2866449	-1.47149	.84779
fs	150	5.197167	1.4962	2.12345	11.8296

Appendix III: Correlation Matrix

	EQ	MON	IO	OC	FO	ROA	FS
EQ	1.0000						
MO	0.0067	1.0000					
IO	0.1315	-0.1523	1.0000				
OC	0.1109	0.3024	0.2197	1.0000			
FO	0.0215	0.17566	-0.2589	0.2615	1.0000		
ROA	0.5091	-0.0279	0.0851	-0.0999	-0.0510	1.0000	
FS	-0.0643	-0.0418	0.1980	0.1423	-0.1763	0.1491	1.0000

Appendix V: Pooled Regression

Source	SS	df	MS	Number of obs = 150
Model	5.12939678	6	.854899464	F(6, 121) = 9.58
Residual	10.8012967	121	.089266915	Prob > F = 0.0000
Total	15.9306935	127	.125438531	R-squared = 0.3220
				Adj R-squared = 0.2884
				Root MSE = .29878

EQ	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
MO	-.1300752	.3096923	-0.42	0.675	-.7431927 .4830423
IO	.0782441	.0396331	1.97	0.051	-.0002072 .1566955
OC	.3306445	.1530993	2.16	0.033	.0275442 .6337449
FO	.044175	.1947494	0.23	0.821	-.3413829 .4297329
ROA	.3101367	.0433696	7.15	0.000	.2242751 .3959984
FS	-.1989023	.0853307	-2.33	0.021	-.367837 -.0299676
_cons	.5952366	.3815585	1.56	0.121	-.1601592 1.350632

Appendix VI: Regression Diagnostics

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
 Ho: Constant variance
 Variables: fitted values of EQ

chi2(1) = 0.76
 Prob > chi2 = 0.4137

Appendix VII Regression Diagnostics

. estat vif

Variable	VIF	1/VIF
FO	2.61	0.383514
MON	2.44	0.410377
OC	1.26	0.790521
IO	1.21	0.827585
FS	1.13	0.887705
ROA	1.05	0.954342
Mean VIF	1.62	

Appendix VIII Fixed-Effects GLS Regression

```

Fixed-effects (within) regression      Number of obs   =   150
Group variable: cross                 Number of groups =   15

R-sq:  within = 0.3275                  Obs per group:  min =   10
      between = 0.0002                    avg   =  10.0
      overall  = 0.0769                    max   =   10

                                           F(6,106)
corr(u_i, Xb) = -0.7976                   =   8.60
                                           Prob > F
                                           =   0.0000

-----+-----
EQ |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----+-----
MON |   .4819925   1.372739     0.35  0.726   -2.239595   3.20358
IO  |  -.3518878   .5083437    -0.69  0.490   -1.359729   .6559529
OC  |   .4272136   .5891144     0.73  0.470   -0.7407631  1.59519
FO  |  -1.773525   3.615702    -0.49  0.625   -8.942007   5.394957
ROA |  -.3219836   .0469251    -6.86  0.000   -22895     .4150171
FS  |  -.2709657   .1200252    -2.26  0.026   -.5089274   -.0330041
_cons |  1.148975    .8474932     1.36  0.178   -.5312629   2.829213

-----+-----
sigma_u  |  .35655164
sigma_e  |  .29817315
rho      |  .58859744   (fraction of variance due to u_i)
-----+-----
F test that all u_i=0:   F(15, 106) =   1.03       Prob > F = 0.4284
  
```

Appendix IX Random-Effects GLS Regression

```

Random-effects GLS regression          Number of obs   =   150
Group variable: cross                 Number of groups =   15

R-sq:  within = 0.3159                  Obs per group:  min =   10
      between = 0.3562                    avg   =  10.0
      overall  = 0.3218                    max   =   10

                                           Wald chi2(6)
corr(u_i, X) = 0 (assumed)             =   56.93
                                           Prob > chi2
                                           =   0.0000

-----+-----
EQ |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
MON |  -.1257307   .3367462    -0.37  0.709   -.785741    .5342797
IO  |  -.0958651   .0473357    -2.03  0.048   -.0009627   .1907675
OC  |  -.3363618   .1659164    -2.02  0.043   -.0111717   .6615519
FO  |  -.0363165   .2113949     0.17  0.864   -.3780099   .4506428
ROA |  .312751     .0434997    7.19  0.000   .2274932    .3980089
FS  |  -.2075899   .0881447    -2.36  0.019   -.3803504   -.0348295
_cons |  .6367498    .3970124     1.60  0.109   -.1413001   1.41468

-----+-----
sigma_u  |  .05160706
sigma_e  |  .29817315
rho      |  .02908457   (fraction of variance due to u_i)
-----+-----
  
```

Appendix X: Hausman Specification Test

hausman fixed random

```

-----+-----
|      Coefficients      |
| (b) (B)                | (b-B)      sqrt(diag(V_b-V_B))
| fixed random           | Difference  S.E.
-----+-----
MON |   .4819925   -.1257307   .6077231   1.330794
IO  |  -.3518878   .1555766   -.5074644   .469927
OC  |   .4272136   .3363618   .0908518   .5652677
FO  |  -1.773525   .0363165   -1.809841   3.609517
ROA |  -.3219836   .312751    .0092325   .0175995
FS  |  -.2709657   -.2075899   -.0633758   .0814651
-----+-----
  
```

b = consistent under H₀ and H₁; obtained from xtreg
B = inconsistent under H₁, efficient under H₀; obtained from xtreg

Test: H₀: difference in coefficients not systematic

```

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
        = 3.08
Prob>chi2 = 0.7984
  
```