

Ownership Concentration and Earnings Management of Listed Manufacturing Firms in Nigeria: Audit Committee Financial Expertise

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ABSTRACT: *Significant corporate shareholders can exert undue pressure on managers to enhance earnings in order to increase corporate value, and that as a result of this undue pressure, managers to resort to earnings management practice in the corporations they manage. This study examined the moderating role of audit committee expertise on the relationship between ownership concentration and real-earnings management in Nigeria. The independent variable (ownership concentration) was measured as shareholders who have more than 5% equity stake in a company, and real-earnings management was measured using the Roychowdhury approach. Audit committee financial expertise which is the moderator, was measured in binary form, 1 if at least one member of the committee has accounting experience, and 0 otherwise. This paper used a sample of 34 manufacturing companies listed on the Nigerian Exchange (NGX) over a period of 15 years from 2007 to 2021. Data was collected from the annual financial reports of the sampled companies. Descriptive statistics, Pearson correlation and Quantile regression was employed for data analysis and the findings show OWNCON has a positive and insignificant effect on REM. However, when audit committee financial expertise was used as a moderator, the effect of ownership concentration on the real- earnings management of listed manufacturing companies in Nigeria became statistically significant. Based on the findings, the study recommends that manufacturing companies should have more concentrated owners because the higher the concentration the less tendency of REM of listed manufacturing companies in Nigeria.*

KEYWORDS: ownership concentration, earnings management, audit committee financial expertise, real earnings management

INTRODUCTION

The globalization of businesses and financial markets, along with increased competition within the market space, is one of the main factors that have increased the value of high-quality information. Earnings management practices undermine investor confidence in the quality of financial reporting. As a result, corporate stakeholders attach great importance to earnings management. However, ensuring the quality of financial information is a difficult task due to high monitoring costs and differing interests between shareholders and management (Alves, 2012). Consequently, reported earnings may not necessarily represent the company's actual earnings. A number of previous studies have examined the impact of earnings management on firms' reported financial statements (Healy, 1985; De Angelo, De Angelo & Skinner, 1994; Klein, 2002; Anwar & Buvanedra, 2019). In fact, prepaid expenses, by their very nature, empower management to decide when to report certain earnings (Alzoubi, 2016). Moreover, it is widely believed that managers opportunistically exploit this discretion and engage in earnings management practices for their own benefit (Watts & Zimmerman, 1986; Subramanyam, 1996; Hao & Yao, 2010; Jiraporn, Miller, Yoon & Kim, 2008, Wati & Gultom, 2022).

On the other hand, in today's corporate world, ownership is becoming more decentralized, and the separation between ownership and control is increasing. According to Jensen and Meckling (1976), the separation of ownership and control can lead to conflicting interests between owners and managers. This phenomenon is commonly known as the agency problem. In general, agency problems arise due to asymmetric information about investment opportunities between owners and managers. As a result, owners have less information to monitor and control administrator activity. This ultimately leads to earning management practices by managers (Warfield, Wild & Wild, 1995). In this contractual situation characterized by conflicts of interest between shareholders and managers, corporate governance employs various mechanisms to resolve the interests of shareholders and managers (Fama & Jensen, 1983; Hart, 1995; Abubakar et al, 2021). There is a significant and ongoing argument in the corporate governance literature regarding the apparent relationship between ownership structure and managers' earning management practices (Kazemian & Sanusi, 2015).

Ownership concentration which is one of the forms of ownership structure is referred to as the fraction of investors with block ownership, usually 5% or more of a company's equity holding. In earnings management, ownership concentration has two opposing consequences. On the one hand, concentrated ownership has an alignment effect on earnings management since block owners have greater control over management. The challenge is that controlling shareholders can occasionally influence actions that are harmful to minority shareholders, making it impossible to predict how ownership structure affects REM. Ownership concentration could reduce or exacerbate agency issues. Because concentrated ownership confers great authority (entrenchment effects), agency conflicts are on the rise (Morck et al., 1988).

Agency conflicts increase because concentrated ownership gives big power (entrenchment effects) which harm minority shareholders (Morck et al., 1988). On the contrary, concentrated ownership might induce managers to keep their interests with stockholders, thereby alleviating agency problems (alignment effect) (Rosenstein & Wyatt, 1997).

The main objective of this study is to examine whether audit committee financial expertise moderates the effect of ownership concentration on REM of manufacturing firms in Nigeria. To achieve this objective, the following hypotheses were formulated and tested

Ho₁: Ownership concentration has no significant effect on the REM of listed manufacturing companies in Nigeria.

Ho₂: Audit committee expertise does not significantly moderate the effect of ownership concentration on

REM of listed manufacturing companies in Nigeria. The moderation of the effect of ownership concentration on REM with audit committee financial expertise is an addition to the existing body of knowledge. Financially literate audit committee will ensure that audit process evaluates the possibility of material misstatements and reduces the risk of undetected misstatement to a manageable level. This study focuses on the manufacturing companies since there are more chances for managers to engage in REM in manufacturing industries than in other sectors. In this study, secondary data was used covering a 15-year period from 2007 to 2021. Since this period extends to the most recent year with availability of the financial report needed for the research the study's time frame is deemed acceptable. The remaining part of this study is organized as a literature review, methodology, data presentation and analysis, conclusion and recommendations. The literature review was done in Section 2. The methodology was described in Section 3. Data presentation and discussion of our findings were done in Section 4. Section 5 finally reports the conclusion and recommendations.

LITERATURE REVIEW/ THEORETICAL UNDERPINNING

In this section, concepts, theories were done and review of related empirical studies was also done.

The conceptual framework of the study is shown in Figure 1. As depicted in Figure 1, the predictor variable is ownership concentration and it is expected to have a direct link with REM (a response variable). The effect of concentration ownership on real earnings management is also expected to be moderated by audit committee expertise.

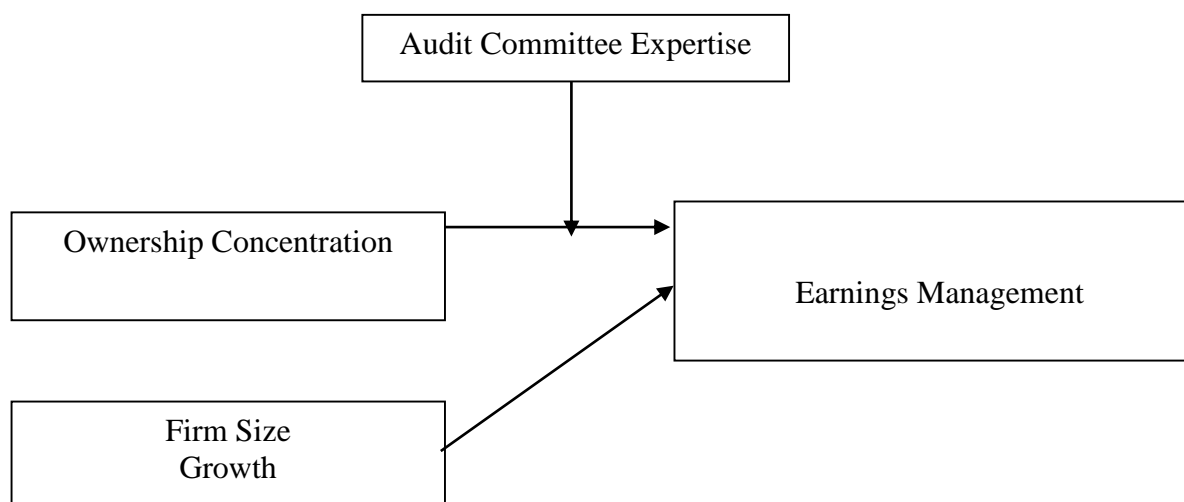


Figure 1: Conceptual Framework

Source: Fieldwork, 2022

Real Earnings Management

Recently, the focus of many researchers has turned to measurement of ownership concentration in the process of reporting through manipulating real operational activities. REM is a relatively new hypothesis that is concerned with the manipulation through changing the underlying operations of a company to achieve target earnings through the strategic timing of making an actual investment, sales, expenditures, or financing decisions. For instance, offering discounts to boost sales or reducing maintenance expenditure to increase reported earnings (DeGeorge et al., 1999). Roychowdhury (2006) provides the following definition for REM as “departures from normal operational practices, motivated by managers’ desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations” (pg. 337). Customers expect lower sales prices in the future, which may force the company to offer their product at a lower price as a result of REM decisions like accelerating sales through more lenient credit terms and higher discounts to clients. This creates customer expectations for lower sales prices in the future, which may force the company to offer its product at a lower price as a result. Companies that manufacture more to raise their gross margin ratio may incur higher carrying costs and use more effort to sell the excess products. (Cohen & Zarowin, 2010), timing the sale of long-term assets and investments during periods of low earnings (Bartov, 1993), overproduction to lower the fixed cost per unit and, ultimately, the unit cost and cost of sales (Chi et al., 2011), and manipulating discretionary expenses such as research and development, advertising, selling, and administrative expenses (Cheng, 2004; Osma, 2008).

In this sense, REM ultimately changes the free cash flows of the company as it involves sacrificing some value-maximizing activities and thus negatively influences its operating performance and company value because actions taken in the current period to increase earnings can have a negative effect on cash flows in future periods (Graham et al., 2005; Cohen et al., 2008; Abubakar et al., 2020), the costs of real earnings manipulation contain the competitive status in the industry, financial health, institutional ownership, and the tax consequences of manipulation (Zang, 2012). Gunny (2010) shows that when a corporation uses actual earnings management to reach some benchmarks, it has a favorable impact on future performance and improves its market reputation. Because of the close relationship between accruals and free cash flows, both must be taken into account when modeling earnings management to avoid endogeneity issues (Zang, 2012; Walker, 2013). A maximizing approach is one in which the earnings management plan aims to enhance earnings above the true level. A minimization approach, on the other hand, is when it tries to lower earnings below the genuine earnings. Because a company's resources are finite, earnings maximization and minimization are more likely to occur in a loop. To put it another way, current maximization will influence future minimizing and vice versa. Maximization techniques have gotten increased attention in the literature because corporations prefer to maximize rather than limit their earnings to improve their image among stakeholders. Current earnings maximization occurs when previous earnings reserves are depleted or future earnings expectations are reduced. Overall, managers strive to increase their earnings to improve the market value of their companies' stocks, obtain greater awards, renegotiate contracts, and become in better shape than their competitors. (Healy, 1985; Demski & Frimor, 1999; Fischer & Verrecchia, 2004).

Because earnings minimization entails conservative reporting, it has received little attention in the literature on earnings management. Minimization causes present earnings to be shifted to future periods. The "cookie jar reserves" strategy is when a corporation reduces present earnings to declare greater

numbers in the future when performance deteriorates (Giroux, 2004). The technique of "taking a big bath" is an extreme type of profits minimization that occurs when management does not expect any bonuses in the present period or attempts to accomplish high earnings targets in the future (Scott 1997; Levitt 1998; Ronen & Yaari 2008).

There may also exist different reasons for management's preference for REM over accrual management. However, Roychowdhury (2006) mentioned two reasons relevant to choosing REM. First, it is easier for auditors or regulators to detect accrual management than REM decisions regarding pricing and production manipulation. Second, management can manipulate real decisions at any time of the year, it allows more flexibility for the management. More importantly, consistent with the evidence provided by Graham et al. (2005), Cohen et al. (2008) document that management switched their choice from accrual management to REM in the post-Sarbanes-Oxley Act (SOX) period. Moreover, Roychowdhury (2006) documents that companies apply manifold REM techniques to achieve predetermined earnings since it is more flexible for the manager to manipulate the financial reporting. Similarly, Graham et al. (2005) take interviews of top executives and provide evidence and recommend that top executives of corporate firms love REM procedures in comparison to the procedures of AEM because real management activities can be unsuspectingly vague and undetectable from optimal business decisions the costs induced under such processes are in no way economically insignificant to the company.

Similar to Roychowdhury (2006) proxies to measure REM, this study will use the abnormal cash flows from the operation, abnormal production costs, and abnormal discretionary expenses. In line with Roychowdhury (2006), several studies examine REM activities by employing the same proxies (Zang, 2007; Cohen et al., 2008; Gunny, 2010; Razzaque et al., 2016) and increase the empirical utility of these proxies. This study applies three different methods and examine the influence on the three variables stated above; firstly, by accelerating sales value through more lenient or increased price discount. Secondly, by reducing the cost of goods sold through increased production and finally, reporting lower discretionary expenses.

Ownership Concentration: Zhang et al. (2016) define ownership concentration as the degree of ownership in a company where a shareholder has a large proportion of shares in companies. It also means absolute concentration of ownership, where only one shareholder has the absolute power to control the company and usually keeps 50% ownership. Ownership concentration is also referred to as block holding. Nigeria's Securities and Exchange Commission (SEC) in its documents relating to the corporate governance code defines block holdings are those shareholders who have more than 5% equity stake in a company (Abdulfatah et al., 2021). Usually, a shareholder who holds a 5% or more of company equity is considered a major (block) stockholder. A major shareholder can be an individual, a corporation, an institutional investor and or a state. Block shareholders have greater incentives to monitor managers as the efforts involved in monitoring are less than the benefits to large equity holdings in the company (Ame et al., 2020).

Park and Shin (2004, p.432) state that "high ownership concentration is a norm rather than an exception around the world". In such contexts, Dechow et al. (2010) posit that agency problem exists primarily between controlling and minority shareholders. The main concern is that dominant shareholders may expropriate the interest of minority shareholders for their own private advantage (Yunos et al., 2010;

Dechow et al., 2010). Yet, similar to managerial ownership, the overall effect of ownership concentration on earnings management is indeterminate. On the one hand, in closely held companies, controlling shareholders need not be concerned about reported earnings because their interests are completely protected (Klassen, 1997). On the other hand, controlling shareholders may have strong incentives for earnings manipulation to appropriate wealth from the public companies they control at the expense of minority shareholders (Park & Shin, 2004). Furthermore, ownership concentration is an internal governance device that allows the largest shareholder to gain control over management behaviour and decisions. According to Farooq and Jai (2012), concentrated ownership is widespread in nations where minority shareholders' legal rights are weak. Gaining control over management in these countries reduces conflict of interest between management and shareholders, reducing agency concerns. Control of a company's actions by a single shareholder, on the other hand, creates agency conflicts between the largest and minority shareholders (Gedajlovic & Shapiro, 2002).

The degree of concentration of share ownership is the percentage of shares usually 5% and above owned by the shareholders. Small shareholders are not interested in controlling the company because they will incur controlling costs (Zhong et al., 2007). Major shareholders play an important role in controlling the company as they have motivations to monitor and manage the company to protect their investments (Gabrielsen et al., 2002; Shleifer & Vishny, 1997; Yeo et al., 2002). If the level of large shareholders is too high, it can cause agency problems (Boubakri et al., 2005). Major shareholders may exercise control to take advantages of minority shareholders, who might not be capable of making vital decisions in the company. Controlling shareholders can enforce their personal preferences even when those preferences are against minority shareholders (Jensen & Meckling, 1976; Shleifer & Vishny, 1997). Therefore, major shareholders can participate in the management of the company and may cause managers to engage in earnings management to gain benefits (Habbash, 2010; Zhong et al., 2007).

As literature posits, managers of highly concentrated companies may be subjected to intense scrutiny (Ramsey & Blair, 1993). When a considerable amount of a firm's equity is held by a small number of people, the company is said to be highly concentrated (Roodposhti & Chasmi, 2010). Few persons with a larger stake in the company have greater reason to be concerned about their investments and hence follow the company's operations (Ramsay & Blair, 1993). Other studies, on the other hand, found evidence that ownership concentration does cause earnings management (Halioui & Jerbi, 2012). The idea here is that wealthy shareholders can exert undue pressure on managers to enhance earnings in order to increase their market value, and that as a result of this undue pressure, managers will be forced to resort to earnings management.

According to Kim and Yoon (2008) the degree of ownership concentration has a positive relationship with earnings management behaviour. The expectation for companies with highly concentrated ownership are of two opposing views. While some scholars are of a view that ownership concentration is negatively related to earnings management (Ramsay & Blair, 1993; Zhong, Gribbin & Zheng, 2007; Chen, Elder & Hung, 2010; Roodposhti & Chasmi, 2010), others conclude that positive relationship exists between ownership concentration and earnings management (Halioui & Jerbi, 2012; Abdoli, 2011). According to Abdulfatah et al., (2021) ownership structure is measured by the number of shares held by shareholders with 5% or more. This study will adopt the measurement approach of Abdulfatah et al. (2021).

Audit Committee Financial Expertise: In Nigeria, Nigerian Exchange (NGX) and Corporate Affairs Commission (CAC) approve the board of directors of companies, shareholders and audit committee mechanisms of corporate governance. Every listed company is required under Section 404 (3) and (4) of the Company and Allied Matter Act 2020 to establish an audit committee. The board of directors' responsibility is to ensure that the audit committee effectively and efficiently carries out their statutory roles which is to ensure that there is credibility and objectivity in the financial reports of companies. The audit committee's primary responsibility is to help the board of directors in enforcing corporate reporting policies (Pincus et al., 1989). For example, Arcay and Vazquez (2005) argued that in terms of information clarity, relevance, and completeness. An audit committee guarantees that there is more voluntary disclosure as a control mechanism over top management, allowing an accurate assessment of top management's actions and behaviors (Allegrini & Greco, 2013) and align the management's and the shareholder's interests (Laksmana, 2008). The audit committee is part of the board of directors and plays an important role in corporate governance that has been emphasized in most of the regulations, such as SOX. Overall, the empirical evidence documents that a strong audit committee provides high earnings quality reporting (Abubakar et al., 2021).

However, different attributes of the audit committee contribute to determining earnings management behaviour. To make it easier for companies to see an effective financial reporting system, it is better for companies to have an audit committee that has experience or expertise in finance and accounting (Susanto & Pradipta, 2020). Of the total members of the audit committee, there should be at least one member who can be in the field of accounting or finance and the chairman of the audit committee can at least read and understand the financial statements. To prevent manipulation, it will be better if at least one member of the audit committee is in the accounting or finance field and it is best if all of them have experience in the accounting or finance field (Mishra & Malhotra, 2016).

The essence of the audit committee is based on two strands of accountability; first, management's accountability to the board, secondly, board's accountability to the shareholders. The audit committee's role stems directly from the board's oversight function as it oversees, both, internal as well as external, audit processes of the company (Collier & Gregory, 1999; Bédard et al., 2004; Lee et al., 2004). Audit committee expertise would provide members with the necessary knowledge to understand the audit committee's primary functions, which are to review the company's financial data on a regular basis and strengthen internal accounting controls in order to improve the reliability and integrity of financial reporting. A good corporate governance system necessitates close coordination among the three audit constituents: the board, internal auditors, and external auditors. The audit committee's makeup and operation have a considerable impact on the quality of financial reporting (Vicknair et al., 1993; Cadbury, 1995).

Extant literature shows that, an effective audit committee needs to have members with the ability, talent and resources to provide oversight and guidance when required on financial reporting, internal controls, and risk management (DeZoort et al., 2002; Brennan & Kirwan, 2015). Krishnan (2005) shows that an independent audit committee with financial and accounting expertise is less likely to experience internal control problems, as reported by predecessor auditors. Prior research (Davidson et al., 2004; DeFond et al., 2005) reports that investors respond positively, and company value increases after assigning a

financial expert to the audit committee. Furthermore, Brick and Chidambaran (2010) report that audit committee effectiveness and structure has a significant and positive effect on firm value, but only before the 2002 SOX Act, suggesting SOX increased management effectiveness, on average.

From the theoretical perspectives of agency theory (Bedard & Gendron, 2010; Li, et al., 2012) and information asymmetry theory, there has been a lot of disagreement over how important corporate governance is in improving financial reporting quality. Specifically, a considerable focus has been given to audit committee expertise as a key monitoring mechanism in a great deal of studies carried out (Mangena & Pike, 2005; Rainsbury, et al., 2008). Such a committee is expected to have a positive effect on reporting quality by ensuring the supervision of managers which will discourage them from engaging in earnings management. Agency theory explains that audit committee presence would make sure that managers behave in shareholders' interest. Therefore, companies set up audit committee to increase the financial reporting quality (Saleh et al., 2007). The basic function of the audit committee expertise is to discipline and monitor managers' discretion and tendencies to manipulate the accounting earnings (Hamdan et al., 2012). Similarly, the audit committee expertise duty is to evaluate the financial reports of the company and to confirm that the reports reflect the true and fair economic position of the company (Klein, 2002). Audit committee expertise is seen as a possible mechanism the government and regulatory agencies can employ to increase transparency and the quality of the financial statement (Bamahros & Bhasin, 2016).

Theoretical Review

A lot of theories on REM have been identified in prior literature such as Agency theory, Stakeholder theory, and Signaling theory. However, this study is hinged on Signaling and Agency theory. This is because for signaling theory and agency theory, information asymmetry appears in the relationship of managers with shareholders and companies with investors. Companies do not send signals or send incorrect signals which may be detrimental to investors. The managers who know the information but intentionally cover them up causing adverse selections for shareholders. According to Jensen and Meckling introduced the agency theory in 1976. Agency disputes between the shareholders and management are the main focus of agency theory. The core tenet of agency theory is that because managers are selfish, they tend to steal, cheat, and lie, they don't make judgments that are in the best interests of shareholders (Arnold & Lange, 2004). An agency relationship may also bring about the issue of information asymmetry. Managers make daily financial and operational decisions on behalf of the shareholders, so they are better informed than the shareholders since they have access to different levels of information than the owners (Mallin, 2007).

According to agency theory, having an audit committee would guarantee that managers act in the best interests of shareholders. As a result, organizations create audit committees to improve the quality of financial reporting (Saleh, et al., 2007). The audit committee's primary responsibility is to control and keep an eye on managers' discretion and propensities to manipulate profits (Hamdan et al., 2012). Similar to this, the audit committee must assess the company's financial reports and ensure that they accurately depict the company's economic performance (Klein, 2002). Additionally, regulatory and governmental organizations present the audit committee as a potential instrument that could improve the integrity and caliber of financial accounts (Bamahros & Bhasin, 2016).

The information asymmetry theory was propounded by; George Akerlof, Micheal Spence and Joseph Stiglitz in 1970 as a possible explanation for the market failure. The theory proposes that an imbalance of information between buyers and sellers can lead to market failure. Asymmetric information refers to situations in which some agent in a trade possesses information not held by other agents involved in the same trade (Spence, 1973). This suggests that managers possess private information about the company and its current and prospective earnings streams that current and potential shareholders do not have, which may allow them to manage earnings (Mirrless, 1999). The superior knowledge possessed by managers regarding companies' prospects is often the source of information asymmetry. The uninformed group tends to be the company's investors (Copeland et al., 2005). This resulting power imbalance may affect the transactions concerned, leading to, at worst, and market failure. An example of such failure, provided by Wilson (2008) is adverse selection, while Ledyard (2008) suggests that two conflict outcomes may be moral hazard or information monopoly. In the case of moral hazard conflicts, which is one of the most common, managers' activities may affect negatively on the shareholders' interests as a result of information asymmetry between the two groups (Nygaard & Myrtveith, 2000). Concerning the second most common conflict type, adverse selection, means that managers may not reveal everything that they know about the company to those external to the company (Scott, 2003).

Shareholders with varying levels of expertise will be unable to make sensible decisions in the face of such uncertainty. Meanwhile, managers can use the ambiguity to mask their failings or communicate the messages they want to express to outsiders. As a result, when there is an informational asymmetry between insiders (e.g., management) and outsiders, signaling and screening occur (e.g., investors). While insiders have better information, outsiders have a limited understanding of product quality and firm performance. As a result, outsiders pay prices that reflect the perceived quality of the company and its products, prompting insiders to provide varied features to different outsiders (Walker, 2013).

Extant literature asserts that companies that are more information-ambiguous may engage in a higher degree of earnings management (Idris, 2012). This is because the more asymmetric the information is, the more difficult it becomes for stakeholders to monitor managers and hold them to account. Subsequently, it is easier for managers to manipulate earnings where there is information asymmetry (Jiraporn et al., 2008). In contrast, if more information is known about the company and its earnings, this may limit the extent of earnings management performed by firm managers (Richardson, 2000). Also, resource or incentive insufficiency, or inadequate access to information that sheds light on managers' activities can increase information asymmetry between managers and shareholders (Schipper, 1989; Warfield et al., 1995).

In fact, specific analytical models in several studies (Dye, 1988; Trueman & Titman, 1988; Christensen et al., 1999) highlight the importance of information asymmetry between a company's management and its stakeholders for managing earnings. Schipper (1989) reinforces this idea, but proposes a less stringent version, suggesting that it is possible to eradicate the block communication by implementing contractual arrangements. Actually, the importance of information asymmetry for managing earnings was extended to posit that the level of earnings management increases as the level of information asymmetry increases. When information asymmetry is high, stakeholders may not have the necessary information to undo the manipulated earnings. According to Richardson (2000), it may be that the fact that some companies have high levels of information asymmetry reflects the fact that their shareholders lack resources, incentives

and/or the relevant information to monitor managers' actions. This may result in the practice of earnings management.

In terms of managing earnings over a prolonged period, a prime example lies in the instance where companies with debt contracts could potentially be motivated to evade debt covenant violations by managing their earnings over a prolonged period. In cases of high information asymmetry, the companies could undetectably adjust their earnings management around the debt contracts. As such, companies with high levels of information asymmetry present greater monitoring challenges than companies with less information asymmetry do. Generally, both the agency theory perspectives (beneficial and opportunistic) focus on the role of information asymmetry, as it causes an adverse selection problem by benefitting insiders to the detriment of outsiders. Essentially, the two groups will be privy to different information, with one having more accurate data than the other does. Thus, unlike the insiders who can ascertain the level of risk within the company, the outsiders cannot assess the relevant information to draw their own conclusions (Chemmanur & Fulghieri, 1997). Managers, referred to as signalers, may feel driven to disclose information that best serves their own goals, particularly if their goals are entwined with the market value and activity of the company. As explained by Cohen and Dean (2005) and Bruton et al. (2010), information asymmetry between the company owner and potential Initial Public Offering (IPO) investors could lead to the top management signaling data to the group of investors most likely to enhance the company's value within the IPO procedure.

Signal theory was first mentioned by Akerlof (1970), then further developed by Spence (1973) and Stiglitz (1975) as a part of asymmetric information. Such asymmetric information occurs when one partner holds the information and the other does not know the true message behind the information. Asymmetric information causes adverse selection as the information is concealed before the signing of the contract. In a firm, information asymmetry appears in the relationship of managers with shareholders and companies with investors. Companies do not send signals or send incorrect signals which may be detrimental to investors. The managers who know the information but intentionally cover them up causing adverse selections for shareholders. Accordingly, the information enables the decision maker to adopt an action strategy in the form of a combination of different options that increase his expected utility function. Meanwhile, the effect of information on the utility function is based on an individual's ability to use its information and revise your actions according to the available information. In this sense, information contributes to the welfare of society by improving the decision-making of various parties in the market.

Companies cannot be considered completely efficient because management prepares financial statements that shareholders must rely on as part of their information. The resulting information asymmetry can take one of two forms: moral hazard and adverse selection. Moral hazard occurs because shareholders do not have the information to monitor management and assess whether it is working to maximize the value of their firms; resulting in different attitudes and motivations for each party. On the other hand, adverse selection occurs because managers have access to private information that allows them to make decisions for their own benefit and ignore shareholder value (Walker, 2013). It is, therefore, possible to assume a state of imperfect information in the company, when information is missing or incomplete. In such uncertainty, shareholders who are at different levels of sophistication will not be able to make their decisions based on rationality. Meanwhile, uncertainty gives managers the opportunity to gloss over their failures or send messages they want to deliver to outsiders. Thus, signaling and screening occur when

there is information asymmetry between insiders (e.g., management) and outsiders (e.g., investors). While insiders have better information, outsiders are imperfectly informed about product quality and firm performance. Accordingly, foreigners pay prices that reflect the quality they perceive of the firm and its products; which forces insiders to offer different qualities to different outsiders (Walker 2013).

This study is anchored on agency theory because if the level of large shareholders is too high, it can cause agency problems (Boubakri et al.2005).

Review of Empirical Studies

This section reviews relevant studies conducted that are related to ownership concentration and real earnings management.

Nguyen et al (2021) investigated the nexus between ownership structure and earnings management in Hanoi Stock Exchange (HNX) and Ho Chi Minh Stock Exchange (HOSE) from 2009-2018. Ownership structure was proxied by ownership concentration, managerial ownership, state ownership and foreign ownership. The sampled data was obtained from 489 non-financial companies with a firm-year observation of 4,290 for each variable. The authors eliminated financial companies such as insurance companies, securities companies and banks because they have different regulations. Nguyen et al, collected data and processed it with Stata 14 to obtain quantitative results through statistical description and multiple regression. The findings from their study revealed that ownership concentration has a positive and significant effect on earnings management, which implies that ownership structure in Vietnam is too concentrated and will create conditions for major shareholders to acquire business operations which will enable them make adjustments to profits in the business. This study is limited by the number of ownership structure variables used, ownership structure has various types, but this study made use of only four variables. The inclusion of other forms of ownership structure could give different result from this present one. Almashaqbeh et al. (2019) investigated the effect of ownership concentration on REM of firms in Jordan. A sample of 101 companies from 2011-2015 was used. The statistical method used was the GLS regression model and the findings from the study show that ownership concentration did not have a direct effect on REM in Jordan. The outcome suggest that concentrated ownership does not have any significant effect on the sample companies.

Amir et al. (2019) examined Ownership structure and real earnings management in Malaysian corporation using a sample size of 650 firm-year observations from Malaysian non-financial corporations from 2012 -2016. The researchers used multiple regression as the statistical tool for analysis and the study discovered that ownership concentration or block holder ownership has a negative and significant effect on real earnings management. Alves (2012) carried out a study on the relationship between ownership concentration and earnings management in Portugal using 34 non-financial Portuguese listed companies between the years 2002-2007. Data was analyzed through the use of Ordinary Least Squares (OLS) regression and finding revealed that ownership concentration negatively and is significantly negatively associated with earnings management in Portugal. The findings from the study indicate that, on average, ownership concentration provide effective monitoring of earnings management in Portuguese listed firms. Farooq and Jai (2012) examined the relationship between ownership structure and earnings management for firms listed at the Casablanca Stock Exchange and their sample consists of all non-financial firms during the period between 2004 - 2007. The study used multiple regression technique for the panel data

analysis and the results from the study show that ownership concentration insignificantly affects earnings management in listed non-financial Moroccan firms.

Teshima and Shuto (2008) investigate nonlinearities in the relationship between managerial ownership and directional earnings management in the developed economy of Japan. To that end, they use quadratic and cubic forms of managerial ownership which is proxied by the fraction of shares held by all directors. Further, they employ the modified Jones model to estimate the absolute value of income increasing and decreasing discretionary accruals. Accordingly, two subsamples emerge from an original sample of 18,196 firm-year observations from 1991-2000. Interestingly, the findings document (i) the incentive alignment effect in firms with low and high levels of managerial ownership, and (ii) the entrenchment effect at intermediate levels of ownership. More specifically, the first subsample (i.e. Income-increasing absolute abnormal accruals) is (i) negatively related to managerial ownership at the levels below and above 13.6% and 38.8%, respectively, and (ii) positively related to managerial ownership at the range between 13.6% - 38.8%. In terms of the second subsample, only linear relationship is found significant. That is, the results show that managerial ownership is negatively related to income-decreasing absolute value of abnormal accruals.

Landry and Callimaci (2003) examine the effect of ownership concentration of shifting earnings through expensing versus capitalising R&D spending¹⁴. Their sample includes 312 firm-years observation selected from industries that have a ratio of R&D expenses to sales 5% or higher. They employ a logistic regression model within which the dependent variable equals one if any amount of capitalised R&D appears in the financial statements, and zero otherwise (i.e. R&D are expensed). Concerning ownership concentration, the researchers consider firms as owner-controlled if any individual shareholder or related party owns 10% or more of voting shares. As such, they use a dummy variable that equals one for ownership levels above 10%, and zero otherwise. The findings show that decisions to capitalise R&D spending are negatively associated with firms with concentrated ownership suggesting that these firms are less concerned about earning management.

METHODOLOGY

This section discussed the population of the study, sample size, the models for this study, variables and their measurements, sources of data collection and methods of data analysis. This study population is comprised of 73 manufacturing companies listed on the Nigerian Exchange (NGX) from 1st of January 2007 to 31st December 2021. The study covers all the firms that engage in productive activities listed on NGX. A filter rule was used to arrive at the sample using the criteria in Table 1.

Table 1

Sample Selection Criteria

Criteria	Number of Firms
Initial population	73
Companies listed after 1 st January, 2006	1
Companies delisted within the study period	1
Companies with incomplete data required for the study	37
Sample size	34

Source: Fieldwork, 2022

After applying the criteria stated in Table 1, 34 companies were selected as sample size.

The annual reports of these sampled companies from 2007 to 2021 served as the source of secondary data for this study. This study employed secondary data collection in order to achieve the objective of the study. The research used quantile regression model to test the functional effect of the dependent variable and the independent variables. Normality test, linearity test, heteroscedasticity and multicollinearity test were conducted to test the assumptions of the regression.

The model for this study is in two steps which is adapted by Roychowdhury (2006), Gunny (2010), Cohen and Zarowin (2010), Zang (2012), Ge and Kim (2013), and Razzaque et al. (2016) and presented as follows:

$$REM_{it} = \alpha + \beta_1 OWNCON_{it} + \beta_2 FS_{it} + \beta_3 GROW_{it} + \varepsilon_{it} \dots\dots (1)$$

$$REM_{it} = \alpha + \beta_1 OWNCON_{it} + \beta_2 ACFE_{it} + \beta_3 OWNCON_{it} * ACFE_{it} + \beta_4 FS_{it} + \beta_5 GROW_{it} + \varepsilon_{it} \dots\dots (2)$$

Where:

REM = Real Earnings Management

OWNCON = Ownership Concentration

ACFE = Audit Committee Financial Expertise

FS = Firm Size

GROW = Firm Growth

i = number of firms' observation

t = the index of time period

ε = the error component for firms

β_0 = Intercept of the model "constant"

Model 1 tests the effect of ownership concentration on REM and two control variables firm size and firm growth were introduced while model 2 tests the moderating effect of audit committee financial expertise on the relationship between ownership concentration and REM. In equation (2), ACFE* OWNCON is the interaction variable, moderating the relationship between the dependent variable and the independent variable. If β_3 is significant at 5% significance level, the ACFE is said to be a significant moderator on the relationship between and REM.

The study follows Roychowdhury's (2006) measure of real earnings management (*REAL_EM*) using three separate proxies: (1) abnormal discretionary expenses (*ABNDISX*); (2) production expenses (*ABNPROD*); and (3) cash flow from operations (*ABNCFO*) as shown in the table 2.

Table 2*Variables, Definition, Measurements and Sources*

S/N	Variables	Proxy	Definition	Measurement	Sources
Dependent Variable					
1.	Real Earnings Management	REM	REM is the sum of ACFO-APROD + ADISX, where ACFO is the level of abnormal cash flows from operations, APROD is the level of abnormal production costs, and ADISX is the level of abnormal discretionary expenses.	Abn.CFO +Abn. Prod. Cost + AbDisex (see details in equation (i)-(v))	Dechow et al (1998); Rowchowhury, (2006); Cohen & Zarowin (2010); Zang (2012); Razzaque et al. (2016); Abubakar et al. (2020); Mardessi & Fourati (2020)
Independent Variables					
2.	Ownership Concentration	OWNCON	The proportion of shares owned by the largest shareholders owning more than 5% of the total shares.	Ownership concentration is measured by shareholders who have more than 5% equity stake in a company.	Roodposhti & Chasmi (2010); Almashaqbeh et al. (2019); Abdulfatah (2021)
Moderating Variable					
3.	Audit Committee Expertise	ACE	Number of financial and accounting experts in the audit committee	AC Financial and Accounting Expertise 1 if at least one member of the committee has accounting experience, and 0 otherwise.	(Krishnan, Wen, & Zhao, 2011; Sani et al., 2018; Mardessi & Fourati, 2020;)
Control Variables					
4.	Firm Size	FS	The natural log of total assets	Natural logarithm of total assets	(Becker et al., 1998; Myers et al., 2003, Ashbaugh et al., 2003; Nagy, 2005; Abbott et al., 2006; Mardessi & Fourati, 2020; Nguyen et al 2021)
5.	Firm Growth	FG	The ratio of the market value of equity to book value of equity.	Firm growth is measured as the change in total assets scaled by lagged total assets.	(Beatty et al., 2002; Johnson et al., 2002; Nagy, 2005, Yu, 2008; McNichols & Stubben, 2008; Almashaqbeh et al .,2019)

Source: Fieldwork, 202

RESULTS AND DISCUSSIONS

The result of the data analysis and hypothesis testing are presented in this section. The presentation and analysis of the descriptive statistics and quantile regression findings are presented first.

Descriptive Statistics of the variables

Table 3 presents the descriptive statistics results for the three measures of the REM, ACFE financial expertise and ownership concentration, and other relevant control variables.

Table 3

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
REM	510	0	2.863	-12.1	46.918
OWNCON	510	.512	.209	.001	.894
ACFE	510	.927	.26	0	1
FS	510	16.474	1.86	12.301	21.592
GROW	510	.364	2.42	-.999	46.186

Source: *Stata14.2 Output*

REM descriptive statistics are presented in Table 3. The companies used in the study had, on average, no REM. The table shows that sampled manufacturing companies in Nigeria use real operations to manage earnings both upwardly and downwardly. The vast range of REM from a minimum of -12.1 to a maximum of 46.918 serves as proof of this. A further indication that there are outliers in the REM of listed manufacturing companies in Nigeria is the large discrepancy between mean REM and standard deviation of REM. ACFE has a mean of 0.927 indicating that 92.7% of the sampled companies have a financial expert as a member of the audit committee. This suggests that most companies adhere to the FRC of Nigeria Corporate Governance Code, which stipulates that members of the audit committee must have financial knowledge. ACFE has a minimum value of 0 and a maximum value of 1. This also implies that there are certain companies whose audit committees lack financial knowledge.

Diagnostic Checks

To guarantee that the findings of this study are reliable, the regression assumptions were checked. A Pearson correlation coefficient was first generated to look at the link between the predictors in order to rule out multicollinearity. The coefficient ranged from ($r = 0.0080$ to 0.2553), indicating that the multicollinearity assumption was upheld. Additionally, the VIF readings, which range from 1.00 to 1.08, did not suggest that the assumption had been broken. Breusch-Pagan test was then used to examine the hypothesis that the error term (residuals) was constant (homoscedasticity). The outcome shows that the homoscedasticity of the residuals assumption is

broken, with $X^2 = 210.617$, $P < 0.000$. Appendix B has a report of statistics of the Breusch-Pagan hettest results.

The Shapiro-Wilk normality test was also used to verify whether the residuals are normally distributed. Evidence suggests that the error term is not normally distributed with Shapiro-Wilk (z) = 11.355, P 0.000 (given in Appendix B). Since the Shapiro-Wilk z -value is significant, it can be concluded that residuals are not normally distributed. Finally, Cook's distance values were calculated to ensure that no influential cases were biasing the model. All values were below 1, suggesting that no cases were biasing the model. Quantile regression, also known as median regression, was used for the analysis to fix the breaches of the classical regression assumptions. Quantile regression, in contrast to OLS regression, gives more reliable and comprehensive estimates when the normality assumption is broken, the data contains outliers or long tails, and the residuals are linked with heteroscedasticity problems.

Results of Regression Analysis

A quantile multiple regression analysis was carried out to see whether ownership concentration significantly predicts how REM is carried out by the listed manufacturing firms in Nigeria and to test the hypotheses. The analysis investigates whether ACFE moderates the effect of ownership concentration on REM. Results from the analysis of Models 1 and 2 are shown in Tables 4 and 5 respectively, while Appendix B contains detailed results.

Table 4

Result of Regression of Model 1

REM	Coef.	Std.Err.	T	P>t	[95%Con f.	Interval]
OWNCON	0.276	0.217	1.270	0.204	-0.150	0.702
FS	0.023	0.037	0.630	0.529	-0.050	0.097
GROW	1.025	0.005	194.540	0.000	1.015	1.035
_cons	-1.001	0.637	-1.570	0.117	-2.253	0.251
R-Squared	0.717					

Source: *Stata 14.2 Output*

With an R-Square of 0.717, the model's prediction of ownership concentration's effect on REM suggests that ownership concentration and other control variables predict or otherwise account for around 72% of the variation in REM among listed manufacturing companies in Nigeria. At 5% critical level, the effect of OWNCON on REM is positive and statistically insignificant ($\beta = 0.276$, $t = 1.270$, $p = 0.204$). The result implies that increase in ownership concentration will lead

to an insignificant reduction in real earnings management of listed manufacturing companies in Nigeria. This result agrees with the findings of Almashaqbeh et al. (2019) which states that ownership concentration has an insignificant effect on REM. However, the result in this study is contrary to Dong et al. (2020) and Nguyen et al (2021) who found that ownership concentration has a positive significant effect on REM.

GROW was found to have a significant effect the REM of listed manufacturing companies in Nigeria. The result indicates that a unit change in GROW will lead to about 1.025 change in REM, *ceteris peribus*. This result implies that growth firm significantly engaged in REM. Based on the result, H_{01} : which demonstrates that OWNCON has no significant effect on the REM of manufacturing firms in Nigeria, was not supported.

The output of Model 2 was used to examine the moderating effect of ACFE on OWNCON and REM. The output of Model 2 was used to examine the moderating effect of ACFE on OWNCON and REM. The effect of OWNCON and ACFE is the relevant variable.

Table 5*Result of Regression of Model 2*

REM	Coef.	Std.Err.	T	P>t	[95%Co nf	Interval]
OWNCON	2.615	0.333	7.850	0.000	1.961	3.270
1.ACFE	1.292	0.204	6.340	0.000	0.892	1.692
ACFE*OWNCON	-2.427	0.394	-6.160	0.000	-3.202	-1.653
FS	0.018	0.038	0.480	0.635	-0.057	0.093
GROW	1.025	0.005	197.400	0.000	1.015	1.035
_cons	-2.157	0.600	-3.600	0.000	-3.335	-0.979
R-Squared	0.719					

Source: *Stata 14.2 Output*

Results from Table 5 reveal that R^2 is 0.72, this suggest that model 2 accounts for almost 72% of the variance in REM. In other words, about 72% of the variation in REM of listed manufacturing companies in Nigeria is predicted or explained by ownership concentration and other control variables. The variable of interest (OWNCON) after moderation exhibits a negative and statistically significant effect on REM at 5% REM ($\beta = -2.427$, $t = -6.160$, $p = 0.000$). The negative effect obtained is consistent with the agency theory of Jensen and Mecklings (1976), which posits that concentration of ownership help align the interest of the managers with that of the firm, since the concentrated owners have the capability of influencing who is on the company board and

consequently the company management team. The findings also support the view that owners of large holdings in a firm can afford to bear the fixed cost of monitoring the firm's managers, so as to safe guard their investment from the managers' opportunistic tendency. Based on this result, Ho₂ which states that ACFE does not significantly moderate the effect of OWNCON on REM of listed manufacturing companies in Nigeria was not supported. This result is as expected, since ownership concentration increases the monitoring and consequently reduces earnings management.

CONCLUSION AND RECOMMENDATIONS

The moderating effect of ACFE on OWNCON and REM of listed manufacturing companies in Nigeria was examined in this study. The study centered on two specific goals. First, to assess whether OWOCON significantly affect the REM of Nigerian listed manufacturing companies. Secondly, the study examined whether audit committee financial expertise and OWNCON jointly affect REM.

Results from quantile regression analysis reveal that OWNCON has a positive and insignificant effect on REM. Based on this finding, this study concludes that managerial opportunistic behavior measured by REM cannot be reduced significantly only through block shareholding in Nigeria. The finding also shows that when ACFE is employed as a moderator, the effect of OWNCON on the REM of listed manufacturing companies in Nigeria became statistically significant.

Based on the findings, the study recommended that manufacturing companies should have more concentrated owners because the higher the concentration the less tendency of REM of listed manufacturing companies in Nigeria. The present study contributes to previous literature by extending the nexus between OWNCON and REM to include the moderating effect of audit committee financial expertise.

The contribution of this study includes motivating shareholders and managers to be own shares of the company which will make them see the company as theirs. If managers have the same concerns as the owners, they will be more communication among them, reduction in agency cost and less real earnings management.

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