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MODERATING EARNINGS MANAGEMENT IN NIGERIA: HARNESSING FREE CASH FLOW, INSTITUTIONAL OWNERSHIP AND AUDIT COMMITTEE INDEPENDENCE

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ABSTRACT

Free cash flow in the Nigerian non-financial firm is related to earnings management (EMT), which has been identified as one of the main culprits leading to catastrophic fraudulent and financial reporting scandals, resulting in huge losses that shareholders can suffer in billions of Naira and dollars. This study examines the Moderating impact of institutional ownership and audit committee independence on the relationship between FCF and EMT of listed non-financial companies in Nigeria. The analysis relies on balanced panel data of seventy-six (76) from 2012 to 2022 and uses purposeful sampling to arrive at a sample of 39. The study's findings suggested that FCF is a resource that triggers managers to engage in EMT. Still, interacting with IWN and ACI has a significant positive impact on EMTs. This implies that the presence of IWN and ACI can reduce the EMT. Thus, the Study recommended that authorities like IFRS, CBN, FRCN, NDIC, SEC, and NSE encourage the manager to invest FCF in projects with net present value. Institutional investors should encourage financial analysts to expose FCF so that investors can make optimal decisions. ACI should use its position to discourage corporate executives from opportunistic behavior. IWN and ACI should monitor the managers to ensure that accounting numbers in the financial statement are correctly calculated and reported in their disclosure.

INTRODUCTION

In the non-financial sector, information about revenue has been the focus as managers use it to manipulate the company's financial accounts, and this has caused disharmony between the company and the shareholders. This issue of revenue management is associated with agency costs that arise due to conflicts between shareholders and managers. This has resulted in the collapse of so many companies. For instance, in Nigeria, the financial scandal witnessed from the non-financial sector is that of Cadbury, Lever Brothers, Oceanic Bank, Afribank, and Intercontinental Bank, among others (Tangngisalu & Jumady, 2020). In most cases, it has been the issue of cooking the books to mislead the gullible stakeholders. Additionally, it was estimated that there were 1,639 incidents in Nigeria in 2012 alone, which caused a loss of about USD 18.5 million, 3,380 cases, and losses of USD 314.5 million. Between 2013 and 2014, about 3,756 cases were recorded worth USD 254.5 million (Alves, 2012). These include the cases of Oando Oil Plc and Arik Airlines, where Oando Oil Plc was exposed for submitting a fraudulent financial statement and declaring a dividend from the unrealized earnings (Yero et al., 2021). The accounting profession that supports judgments concerning the preparation of financial statements includes the (IFRS) and (GAAP), allowing Nigerian firm managers to choose the method they want to report their financial accounts. This has aided them in overstating the company's accounts receivable, inventories, and fixed assets, giving room to earnings management. The issue of concern is that when the company manager discovers an excess or surplus FCF and no profitable investment opportunities are available, they often abuse the FCF, increasing agency costs, inefficient resource allocation, and wrongful investment. Academics, professionals, and legislators are now concerned about manipulating financial accounts. The free cash flow in the Nigerian non-financial firm is associated with earnings management, as depicted by their annual report's nature (Abdollahi & Rezaei Pitenoei, 2020). In both developed and developing economies like Nigeria, earnings

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management is one of the primary sources of culprits that lead to catastrophic fraudulent financial reporting scandals. This has resulted in huge losses suffered by the shareholders, amounting to billions of dollars. Also, in Nigeria, the monumental frauds engineered almost to perfection by the once highly respected Chief executive officers (CEOs) as the trusted agents have betrayed their trusts, pursued their selfish interests, and left their owners heavily burdened with losses (and indebtedness); their potential investors (both local and foreign) deeply dented with fear of trusting Nigerian's prevailing system of private corporations; and the market and the entire economy in a state of deep shamble. Studies have examined the factors influencing audit committee independence (ACI), institutional ownership (IWN), and the association of free cash flow in Nigerian non-financial firms with earnings management, as shown in their annual reports (Afrizal et al., 2021; Mwangi & Nasieku, 2022). Thus, studies have shown that factors influence IWN and ACI in non-financial firms (Abdollahi & Rezaei Pitenoei, 2020). This study indicates that IWN and ACI may affect FCF and employed different measures to investigate the level of IWN and ACI. Following Baron and Kenny (1986), this Study introduces IWN and ACI as moderating variables to strengthen the relationship between FCF and EMT. Thus, there is a need to introduce a moderating variable because of the change it will make in the direction of the relationship between independent and dependent variables and how it can strengthen it (Potharla et al., 2021).

LITERATURE REVIEW

Concepts of Earning Management

From the bodies of literature, there was no consensus on the definition of EMT. However, the most widely recognized definition of EMT is given as the discretion used by managers in altering the direction of the accounting process to have personal gain. According to Amin et al. (2018), earnings management may occur when asymmetric information arises due to moral hazard; this may encourage management to do EMT. Healy and Wahlen (1999) investigated why managers use judgment concerning the company's financial position, intending to structure the transactions to alter the financial report. EMT is a situation where managers may use their discretion to change the financial reporting to alter the transactions in such a way that would deceive the stakeholders of the company's performance. This will influence any contractual agreements that are associated with the accounting numbers. Lourenço et al. (2018) averred that those managers used equity valuation to manipulate earnings. Thus, Kothari et al. (2005) argued that once the earnings are smooth, it will mislead all the stakeholders that have an interest in understanding how well the companies are performing financially, thus, indirectly, this makes accountings numbers less informative as a result of EMT discretion that is involved.

Concepts of Free Cash Flows

In accounting, the equity holders can view free cash flow as cash claimable when all short-term reinvestments and other obligations like tax and interest are cleared. In another way, it can be seen as the leftover cash used at the management's discretion. Alzoubi (2016) states that managers may sometimes engage in unprofitable ventures due to excess free cash flows. This has often created a problem by triggering the manager to indulge in EMT. This happens because of the opportunities it gives managers to invest in projects that would sometimes yield higher net present value or not with the sole aim of deceiving the investors. According to Narenjbon et al. (2016), free cash flow can be seen as the excess or surplus cash available after the management has funded all the profitable projects. Also, it refers to free cash flow as the internally generated capital and revenue that can be used to fund any project that would yield more profit (Shadmehri et al., 2017).

Concept of Institutional Ownership

Alexander (2021) viewed IWN as the number of shares owned by institutional investors in other companies, such as insurance companies, financial institutions, pension funds, etc. Salehi et al. (2017) stated that institutional shareholders are term as transient. It was evidenced that they are often associated with the monitoring role of ownership structures. In addition, they serve as a preventive means for managers to prevent opportunistic behaviors. Their evidence indicated that transient institutional shareholders might influence the managers to focus more on economic performance that prevents opportunistic behaviors (Parwar et al., 2021; Potharla et al., 2021). Institutional shares are incentivized to monitor EMT performance because of their position. IWN can be viewed as the Percentage of shares that the institutional block holder has in the companies compared with the total stock of the companies. Utomo and Pamungkas (2018) revealed that institutional investors are often seen as a large group of agents of stockholders in capital markets with corporate equity that accounts for a significant fraction of stock turnover in the stock market.

Concept of Audit Committee Independence

Egbunike et al. (2017) state that audit committee independence may be defined as the way auditors perform their work with an unbiased mind when making decisions concerning the financial position of the firms. While Firnanti (2017) opines that the board role that the company assigned is to monitor management behavior and to make sure that they minimize earnings management actions to increase investors' trust, Afrizal et al. (2021) viewed ACI as the stake independent directors in the company against the number of directors on an audit committee of the companies. Sadique (2016) stated that ACI could help mitigate the effect of EMT-listed companies; however, because of the discretionary accruals, managers sometimes use to influence the authors from reporting a good quality audit.

Empirical Review

Free Cash Flow and Earnings Management

Abdollahi and Rezaei Pitenoei (2020) conducted a study on surplus FCF and EMT. The study used auditor size as moderate, and 103 companies traded on the Tehran Stock Exchange from 2013 to 2017. The study used balance panel data to analyze the data, and the results revealed a significantly positive relation between surplus FCF and EMT. Also, the results show that audit size has an insignificant positive relationship with surplus FCF and EMT. They suggested that managers can use positive earnings management when there is free cash flow to maximize shareholders' value. The motive of using positive earnings management by the managers when there is free cash flow is to outsmart the competitors and increase the stakeholders' share value in the capital market. Thus, their results align with the Study of Rusmin et al. (2014), who conducted a study using the Asia capital market. Examined the relationship between FCF and MGW on EMT. The data were analyzed using multiple regression. Thus, the Study used 240 non-financial firms from the Indonesia Stock Exchange from 2014 to 2016. The survey indicates that FCF has a significant influence on EMT. While MGW has an insignificant influence on EMT, this implies that managers can use their knowledge when there is free cash flow to increase the investors' share value. The result conforms to the similar work conducted in Tehran by Shahrokh et al. (2015), who found a significant positive relationship. The conflicting work about the free cash flow is the work of Afrizal et al. (2021), investigating the effect of earnings management on firm value with corporate Governance as a moderating variable using some selected non-financial firms in India; the result of the Study shows that FCF hurts revenue generation by management because of their opportunistic behavior.

Institutional Shareholding and Earnings Management

Parwar et al. (2021) studied the association between IWN and EMT using 206 listed companies in Pakistan from 2013 to 2018. The data was analyzed using the Kothari et al. (2005) model to measure EMT practices. The result shows that IWN's impact on EMT practices in Pakistan is consistent with the finding of Wimelda and Chandra (2018), who discovered that institutional investors have the propensity to monitor managers in non-financial firms. Potharla et al. (2021) evaluated the relationship between IWN and EMT using 3,165 non-financial listed companies in India from 2011-2018. Multiple regressions were used to analyze the data. The results reveal that IWN has a significant negative effect on EMT. Their findings corroborate those of (Salehi et al., 2017; Shadmehri et al., 2017), who considered three variables: FCF, Corporate Governance, and firm size, using firms quoted on the Tehran Stock Exchange that found a significant positive relationship.

Audit Committee Independence and Earnings Management

Fakhroni et al. (2018) conducted a study on the impact of ACI when interacting with free cash flow on EMT when it interacts with Governance and ownership like ACI and found a significant impact on EMT. Salehi et al. (2017) and Afrizal et al. (2021) conducted a study on the independence of the audit committee in mitigating EMT when interacting with free cash flow. The result indicates a significant positive relationship. Alvarado et al. (2019) investigated the influence of audit committee independence when interacting with free cash flow in reducing EMT. The Study uses 3,830 listed non-financial firms in European countries from 2005–2009. The study results show that the Big Four audit, auditor specialization, and audit committee independence have reduced the EMTs. Suryanto (2018) studied ACI and EMT using 106 firms from 2012 to 2017. The study used ACI as a moderating variable. The findings show that board size and ACI are positively associated with EMT. When interacted, it showed an insignificant negative relationship with EMT.

Firm Size and Earnings Management

Kariuki et al. (2015) analyzed the effect of firm characteristics on EMT using a sample of 156 firms selected using a stratified random sampling technique. The study's findings show that FMZ is one of the critical determinants of FCF on EMT. Reza and Ghodratalah (2016) evaluate the relationship between FCF and EMT for a sample of 104 companies traded in Iran's capital market from 2009 to 2013. The findings revealed that FMZ is an essential determinant of ACI and EMT. Narenjbon et al. (2016) used firm size proxies by total assets, using a sample of 789 for 85 years from 2001 to 2014. Firm size was considered an indicator of performance, and most firms with surplus free cash flow invest in projects with positive NPV (Swastika, 2013).

Moderating Effect of Institutional Ownership on the Relationship between Free Cash Flow and Earnings Management

In most cases, introducing the code of corporate Governance worldwide has aided in mitigating the crisis and reducing EMT that may be perpetrated by the EMT when there is free cash flow. Using Jordanian-listed non-financial enterprises, Al-Haddad and Whittington (2019) investigated the impact of IWN as an interacting variable that connected FCF and EMT. The Study's findings show that IWN considerably moderates the link between FCF and real and accrual earnings manipulations. The study used 108 manufacturing companies listed on the Tehran Stock Exchange from 2009-2015. The modified Jones model of discretionally accrual was used as an indicator to measure. The data were analyzed by using multiple regressions. The results of the Study indicated a significant positive relationship between FCF and earnings management. Thus, even after moderating, it significantly affects FCF and EMT, as in the work of (Salehi et al., 2017). Carina (2017) examines the effect of IWN on EMT using IWN as an interactive variable. The Study uses 13 companies quoted on the Indonesian capital market from 2008 to 2011; the results showed that IWN when interacting with FCF, is still significant. While in a similar study, Vince et al. (2016) examined the influence of IWN on EMT. The study used 115 non-financial companies quoted on the Indonesian capital market from 2008 to 2012. They considered the efficient monitoring hypothesis and suggested an insignificant association between IWN and EMT for this Study. Thus, IWN and FMZ moderate their relationship with EMT. Chalak and Mohammadnezhad (2012) considered the association between FCF, low growth, and EMT on the Tehran capital market and have a significant positive relationship.

Moderating Effect of Audit Committee Independence on the Relationship between Free Cash Flow and Earnings Management

Wahjuni and Fina (2020) investigated the relationship between ACI, FCF, and EMT. The study used 60 companies in the Indonesian capital market as of 2018. The variables used for the Study include IWN, board size, and ACI. The finding revealed that ACI moderate FCF, IWN, board size, ACI, and EMT are significantly positive. Shahwan (2021) evaluated the firm's characteristics by studying the effects of ACI, FCF, IWN, and EMT using 39 industrial firms that had traded in Iran's capital market from 2017 to 2019. The results of the Study showed that ACI, when interacting with FCF and EMT, would significantly impact EMT. Meanwhile, IWN has an insignificant effect on EMT. The findings are similar to the work of Nekhili et al. (2016) in a related study that investigated the influence of ACI when interacting with FCF, IWN, and EMT. The study used 60 manufacturing companies quoted on Indonesia's capital market from 2014-2016. This research shows that ACI strongly influences EMT when moderated with IWN FCF. Rina and Takiah (2009) examined the relationship between FCF and EMT as moderated by the ACI. One hundred fifty-five manufacturing firms traded on Malaysia's capital market in 2001 were used. Findings show a significant positive relationship between FCF and EMT when using a moderating role of ACI. In a related study, Taheri et al. (2014) used 101 firms from 2007-2012 to examine the moderate effect of owners and how the managers are motivated and have the power to monitor the utilization of assets. The finding indicated that ACI revealed a significant positive relationship when used to moderate the relationship between FCF, IWN, and EMT.

Theoretical Framework

Agency Theory

In non-financial companies and firms, the primary sources of conflict are the interests managers want to play to outsmart the shareholders, especially when there is FCF. Jensen (1986) stated that managers sometimes misused the FCF that remained after paying dividends and taxes. This indicates that FCF left has not been invested in a project that will yield positive net present value. However, (Jensen, 1986 Yero et al., 2021 Yero & Usman, 2013) stated that managers could invest FCF in projects that have Negative NPV, the reason being to avoid a corporate takeover, which is referred to from the earnings management perspective as shrinking behavior. Therefore, this may be seen as how high FCF is used to cause agency problems as managers try to satisfy their interests. From another angle, managers may resort to earnings management because of the Empire Building. This is in tandem with how the high FCF of a company may influence the company's future growth opportunities in a way that the market gives higher values to companies `FCFs with higher growth opportunities. Extravagant spending behavior sometimes lands the shareholders into trouble because of the perquisite consumption of the managers; this unnecessary spending, in most cases, increases agency problems between the agent and the principal, thereby resulting in earning manipulation. Conversely, this may lead the firm to repurchase its share by carrying out a related party transaction with reference shareholders. This behavior may affect the firm's financial position, leading to low stock prices. To correct the situation, managers may manipulate earnings by overlooking available means of using discretionary funds to facilitate their private gain. There is always a significant relationship between FCF and EMT. They asserted that because of a high level of FCF, managers often manipulate earnings to continue reporting good performances to safeguard their job security. This shows that firms with a high FCF used it through discretionary accruals to cover up Negative NPV (Jensen, 1986). Therefore, based on all the agency theory, it is used to anchor the variable of this Study. There are six hypotheses of the Study:

In line with the above-mentioned research questions and objectives, the following Hypotheses are formulated:

H$_{O1}$: Free cash flow does not significantly impact the EMT of listed non-financial firms in Nigeria.

H$_{O2}$: Institutional ownership does not significantly impact the relationship between FCF and EMT of listed non-financial companies in Nigeria.

H$_{O3}$: Audit committee independence does not have a significant impact on the relationship between FCF and EMT of listed non-financial companies in Nigeria

H$_{O4}$: Institutional ownership does not moderate the relationship between FCF and EMT of listed non-financial companies in Nigeria.

H$_{O5}$: Audit committee independence does not moderate the relationship between FCF and EMT of listed non-financial companies in Nigeria.

H$_{O6}$: Firm Size does not significantly impact the relationship between FCF and EMT of listed non-financial companies in Nigeria.

Conceptual Framework

The framework illustrates the relationship between the independent variable, moderator variable, and dependent variables, as seen in Figure 1 below:

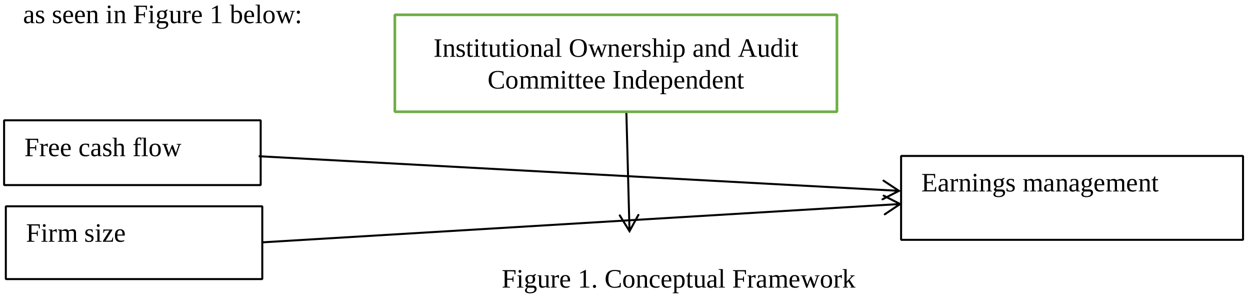

Figure 1. Conceptual Framework
Source: Computed by Researcher

MATERIALS AND METHODS

This Study uses a correlation research design, which is more appropriate as it allows for testing the relationships between FCF and EMT with the moderating roles of ownership and government in Nigerian quoted non-financial companies. This may align with positivism, which makes research more scientific, objective, and systematic in its approach as it supports a quantitative method. The study population comprises all 76 manufacturing companies trading on the floor of NGX for eleven years from January 2012 to 31st December 2022. The sample was drawn by ensuring adequate attention was paid to the sample size and considering the population's nature. Also, simple criteria were adopted using a purposeful random sampling technique to arrive at the sample size.

- The companies must be quoted on NGX within the study period.
- The company under study must have complete data in the annual report and account of the company before it forms part of the sample size, with a full annual report during the years under review.
- The firms should not be delisted within the period, and 39 companies from the manufacturing companies listed on the floor of the NGX

should not be delisted.

Because thirty-nine (39) companies formed the sample size, all the companies were quoted within the Study period. Meanwhile, the rest, which are thirty-seven (37), failed to meet the criteria, so they were dropped because their data was not complete. The data was sourced secondarily from published annual reports and accounts on the (NGX). The study used multiple regression analysis as a data analysis technique to investigate the impact of FCF and EMT on listed firms in Nigeria. This is because it helps to assess the impact of the various proxies of independent variables on EMT. In addition, panel data was used for this study. The study also used some independent variables, including FCF moderated by IWN and ACI, while the dependent variable is EMT.

Table 1. Measurement of Variables Employed in the Study below.

Variable Acronyms	Definition	Measure
EMT	Real Earnings Management Metric	Abnormal Discretionary Expenses plus Abnormal Cash flow plus Abnormal Production of modified Kothari et al. (2005).
FCF	Free Cash Flow Level	Operating cashless tax less interest expenses less total dividends scale by sales Yero and Hamman (2015) and Yero et al. (2021)
IWN	Institutional Ownership	Cumulative Percentage of shares exceeding 5% held by Institutional Investors (Gregory & Wang, 2013).
ACI	Audit Committee Independence	The proportion of non-executive Directors in the committee membership. Klein (2002).
FMZ	Firm Size	Natural logarithm of total assets. Shadmehri et al. (2017)

Sources: Compiled by Authors from Various Literature (2022)

Model Specification

The study used two models. The first model is considered a functional model, while the second model (OLS) was derived from the EMT model.

Measuring EMT – discretionary accruals (DAC) was estimated using a model of Kothari *et al*. (2005), as follows:

$$TA_{i,t}/A_{i,t-1} = a_0\ (1/A_{i,t-1}) + a_1\ [(\Delta CA_{i,t-}\ \Delta CCR_{i,t})\ /A_{i,t-1}] + a_2\ (PPE_{i,t}/A_{i,t-1}) + a_3\ (ROA_{i,t-1}) + e_{\ i,t}\text{--------}(1)$$

With:

$TA_{i,t}$: Total accruals of the firm i in year t were measured as follows:

$TA_{1i,t}$ = Total net income – it is derived from cash flow from operations.

$A_{i,t1}$- : Total assets from the beginning of the period of firm i;

$\Delta CA_{\ i,t}$: Change in sales from year t and year t –1 of firm i;

$\Delta CCR_{\ i,t}$: Change in receivables from year t and t–1 of firm i;

$PPE_{\ i,t}$: Gross value of noncurrent assets in the year t of firm i;

$ROA_{i,t-1}$: Ratio of the income of the firm i in relation to total assets before and at of the period.

All variables in the model are deflected by total assets (t–1). To estimation the accruals, the Study adopts Hribar and Collins’s (2002) approach. Non-discretionary accruals (*NDACi,t*) are obtained using the EMT model proposed by Kothari et al. (2005):

$$NDAC_{i,t}/A_{i,t-1} = \hat{a}_0\ (1/A_{i,t-1}) + \hat{a}_1\ [(\Delta CA_{i,t} - \Delta CCR_{i,t})\ /A_{i,t-1}] + \hat{a}_2\ (PPE_{i,t}/A_{i,t-1}) + \hat{a}_3\ (ROA_{i,t-1}) \ldots\ldots \quad (2)$$

Discretionary accruals ($DAC_{i,t}$) in respect of firm i and in year t were obtained by considering the difference between total accruals ($TA_{i\ ,t}$) and non-discretionary accruals ($NDAC_{i,\ t}$).

$$DAC_{i,t} = TA_{it}/A_{i,t-1} - [\hat{a}0\ (1/A_{i,t-1}) + \hat{a}1\ [(\Delta CA_{i,t}- \Delta CCR_{i,t})\ /A_{i,t-1}] + \hat{a}2\ (PPE_{i,t}/A_{i,t-1}) + \hat{a}3(ROA_{i,t-1})] \ldots\ldots \quad (3)$$

Measuring Free Cash Flow Variables
This is measured as free cash flow considering cash claimable by the equity holders- (Yero & Usman, 2013).

Second Model Moderating Variables
$EMTit = \beta_0+\beta_1FCF + \beta_2IWN + \beta_4ACI +\beta_5FMS +e_{it}$……………………………………………………………......(4)
Where:
EMTit = discretionary accrual
FCF = free cash flow
IWN = institutional ownership
ACI = Audit Committee Independence (ACI)

FMS = Firm Size (control variable)
(Narenjbon et al., 2016)

$EMT_{it} = \beta_0 + \beta_1FCF+ \beta_2IWN+ \beta_3ACI + \beta_4FCF *IWN+ \beta_5FCF*ACI + \beta_6FMS+ e_{i,t}$………………………………. . . ..(5)

Hence, the regression was used to test the hypotheses of the Study, which may result in the following:

- It has the advantage of testing the relationship between two variables.
- The technique helps assess the policy implications of the findings, which is part of the main focus of the study.

RESULTS

Descriptive Statistics
The study undertakes a descriptive data analysis to avoid presenting a spurious result. This has aided in detecting the abnormality in the data set used for the Study and its characteristics.

Table 2. Descriptive Statistics

	OBS	MEAN	STD-DEV	MIN	MAX
EMT	429	**.5183**	**.4718**	-0.019	.9986
FCF	429	**.9211**	**.0568**	**.6793**	**.9999**
IWN	429	**.3135**	**.0807**	**.0028**	**.4159**
ACI	429	**.4487**	**.2891**	**.0986**	.9163
FCFIWN	429	**.0665**	**.0383**	**.0002**	**.2597**
FCFACI	429	**.9437**	**.1141**	**.1001**	**1.996**
FMS	429	**.0443**	**.0377**	**.0001**	**.3132**

Source: Computed and Compiled by Author, 2024

The mean value of EMT obtained through discretionary accruals is .5183; this shows that from the above data, the mean value of .5183 is more than the STD-DEV value of .4718. Although considering the range, their values are not too far apart; this indicates that the Mean of .5183 represents the data well. The mean value of .9211 and the STD-DEV of free cash flow revealed that .0568 is less than one. Therefore, the variation of the data values is almost the same and reflects that the average value has a deviation from the average value of .9211; this shows that it can represent the whole data as the STD-DEV value is minimal compared to the Mean value. Thus, with a minimum of .6793 and a maximum of .9999, the surplus FCF in the companies may lure the managers to commit EMT. The mean value of .3135 and STD-DEV of IWN revealed that .0807 is less than one. Therefore, the variation of the data values is almost the same and reflects that the average value has a deviation from the average value of .314; this shows that it can represent the whole data as the STD-DEV value is minimal compared to the Mean value. Table 2 indicates that Nigerian non-financial companies have a feature of institutional investors (INW). Institutional owners have an average of .3135 stake in the firms, ranging from zero to .0807. Therefore, because of their stakes, they have the power to monitor management to reduce EMT. Further, a minimum of .0028 and a maximum of .4159 institutional ownership can effectively monitor the managers in association with EMT.

However, concerning ACI monitoring, because of the range of average index value of .4487 to .2891 level of dispersion in the sample. ACI has a crucial role in submitting a report on the activities of the managers. The ACI report may lead to less EMT as this can be statistically buttressed from the result when the mean and standard deviation are not far apart as the Mean is .4487, more significant than the standard deviation of .2891. It further shows that a minimum of .0986 and a maximum of .9163ACI in the firms has a remarkable impact on EMT. The interaction between FCF and institutional ownership on EMT has a standard deviation STD-DEV that is worth .0383, and it is less than the mean value of .0665; on the other hand, it reflects the average value as the data deviates from the average value of .038. These also show that it can represent whole data as the STD-DEV value is minimal compared to the Mean value. However, with a minimum of .0002 and a maximum of .2597, institutional ownership moderately has a significant effect in monitoring the managers in association with EMT. In non-financial companies, especially in Nigerian independence, audit committees are crucial in monitoring company managers concerning free cash flow that would have invested in a project with positive net present value. This can be seen from their average variance of .9437 and the level of dispersion of .1141. The level of the independent audit committee is significant as it stands at .9437, As a result, this independent audit committee has power through the audit report they would submit to companies compared with IWN in monitoring managers in respect to EMT in exerting pressure on managers. This shows that the minimum of .1001 and a maximum of 1.996 ACI of the firms has a remarkable impact on EMT monitoring the free cash flow.

Correlation matrix

Table 3. Correlation matrix

Variables	EMTT	FCF	INW	ACI	FCFINW	FCFACI	FMS
EMTT	1.000						
FCF	0.0808	1.000					
INW	0.1384*	-0.0718	1.000				
ACI	0.1905*	0.0197	0.223*	1.000			
FCFINW	-0.3519*	0.0334	0.1083*	-0.1256	1.000		
FCFACI	.2732*	0.0571	-0.0691	-0.0136	0.3894*	1.000	
FMS	-0.2828	0.0403	-0.1047*	-0.1495*	0.2724*	0.1594*	1.000

Source: Computed and Compiled by Author, 2024

The result of regression on the effect of FCF 0.0808, institutional ownership 0.1384*, independence audit committee -0.0718 has a significant relationship with EMT, institutional ownership when moderated with free cash flow0.0334 and independence audit committee when moderated with free cash flow is 0.0571 and firm size which is the control variable indicates that large firms 0.0403because of the size may reduce the EMT as their coefficient is significant and positive at 1% level. The coefficient of free cash flow and IWN (-0.0718) has indicated that it does not influence the managers in managing the FCF in considering the way managers spend the free cash flow of the companies. Also, the ACI, FCF, and IWN coefficients (0.0197 and 0.223*) indicate that the positive sign has less effect on reducing the EMT. Table 3 also shows that introducing the moderating role of governance and ownership index in the relationship between EMT and FCF has improved the coefficient of FCF and IWN as the coefficient changes from Negative to positive signs. This shows that the presence of an ownership index like IWN has shown less influence in limiting non-financial firms from practicing EMT activity as their presence has not changed the direction of the FCF coefficient from a positive to a negative relationship (0.0334, 0.1083*, 0.0315).

Finally, FCF, when interacting with ACI, has less influence in changing the direction of the relationship as they are positive-like (0.0571, -0.0691, 0.0691, -0.0136, and 0.3894*). Thus, only FCFACI and IWN have changed the direction of the relationship, meaning the presence of institutional shareholders would enhance the monitoring of managers from misappropriating the company's resources. Furthermore, concerning the Size of the firms, the significant relationship and other variables show that because of the size of some companies in the non-financial sector has made the managers engage in less EMT (0.0571, -0.0691, 0.0691, -0.0136 and 0.3894*). In the end, considering the value of less than 0.7, it further buttresses the lack of multicollinearity.

Hausman Specification Test

Since the nature of the data is the panel and the data indicate heteroskedasticity, fixed and random effect regression were run. This was done to choose the preferred model for the Study between the two. The essence of this is to check whether the error term is correlated when regressed. Thus, the study indicates that the error term is not associated with the Chi_2 probability, which is insignificant. Therefore, a panel-corrected error must be run to see whether the study results can be improved.

Table 4. Test of Multicollinearity

Variables	VIF	1/VIF
FCF	**1.01**	**0.9894**
IWN	**1.11**	**0.8986**
ACI	**1.10**	**0.9131**
FCFINW	**1.31**	**0.7623**
FCFACI	**1.21**	**0.8285**
FMS	**1.11**	**0.8973**

Source: Computed and Compiled by Author, 2024

The Variance Inflation Factors (VIFs) and tolerance statistics are used to check for multicollinearity. The VIFs would show the relationship between the predictor and the predictors, while 1/VIF represents the reciprocal tolerance value. Thus, the rule of thumb is that if VIF is greater than 10 and the tolerance value is less than 0.1 or 0.2, it shows a presence of multicollinearity, and for multiple regression models, it calls for concern. The analysis reveals no evidence of multicollinearity for variables FCF, FCFIWN, FCFACI, IWN, ACI, FMS, and EMT as no VIFs exceeding 10 and tolerance statistics 1/VIF below 0.1.

Regression Result

Table 5 presents the result of the Study's dependent variable, EMT, and independent variables (FCF, IWN, ACI, FCF*IWN. FCF*ACI, FMS, and EMT). This is followed by analyzing the association between the dependent and independent variables through the beta coefficient, t-value, p-value, and coefficient of determination R^2. Based on the selection criteria, fixed effect models are considered based on Hausman's test presented in Table 4.6 of the Study; however, since the model is not heteroscedastic thus, the fixed effect models could no longer be considered therefore, the model that can address the heteroskedasticity in the fixed effect model is Panel Corrected Standard Error (PCSE) model. Thus, this study employed the PCSE model based on the recommendation, and finally, the PSCE model is presented and discussed next.

Table 5. Regression Table

Variables	Coefficient	t-value	Prob
EMT	.2284	0.57	0.570
FCF	.9233	2.28	0.022
INW	.7245	2.92	0.004
ACI	.1660	2.26	0.024
FCFINW	-3.137	-5.42	0.000
FCFACI	-.5.947	-3.27	0.000
FMS	-2.0873	-3.62	0.000
R^2	0.2216		
Wald (6)	123.89		
Prob.	0.0000		

Source: Computed and Compiled by Author, 2024

Test of Hypotheses

Free Cash Flow and Earnings Management

Hypothesis one shows that FCF influences the relationship between FCF and EMT; the Study results from PCSE are shown in Table 4.3. The variable of FCF has a significant and positive impact on the variable of EMT, where the coefficient is .9233, the t-value is 2.28, and it is significant at 0.022(5%). This provides sufficient evidence to reject the first hypothesis of the Study.

Institutional Ownership and Earnings Management

The hypothesis states that "IWN influences have a significantly positive relationship with EMT. The study results show that institutional ownership significantly and positively impacts the EMT. It is because the possibility of that is less than 0.05. The coefficient is .7245, and the t-value is 2.92, significant at 0.004 (1%). Thus, null hypothesis two is hereby rejected.

Audit Independence Committee and Earnings Management

Nevertheless, the variable related to the ACI has a significant positive effect on EMT with the coefficient of.1660, t-value=2.26 and P-value 0.024 which is >0.05. The result depicted that a long audit relationship may influence the ACI. Given the considerable influence of the ACI on the auditor report, it has reduced the level of EMT. Therefore, based on that, Hypothesis H3 is confirmed.

Free Cash Flow Institutional Ownership and Earnings Management

Institutional ownership interacts with FCF, the moderating effects of two variables of FCF and IWN have a significant adverse effect on EMT, and since the result is less than 0.05, the impact is significant considering the coefficient of -3.137 and t-value of -5.42, which shows that the presence of institutional shareholders and the negative coefficient depict that it has lessen the EMT in the non-financial companies about FCF. It is significant at 0.000(1%). This indicated that hypothesis five of the Study was also rejected.

Audit Independence and Free Cash Flow Committee and Earnings Management

The result of the Study of ACI moderate free cash flow is that the moderating effects of two variables, FCF" and ACI, are adverse to EMT. Since it is less than 0.05, the impact is significant considering the coefficient of -.5.947 and t-value of -3.27, which show a level of significance of 0.000 significant at 1%. This shows that the interaction between FCF and ACI has lessened the EMT practice in non-financial companies. This revealed that hypothesis seven of the Study is hereby rejected.

Firm Size and Earnings Management

The size of the companies, which serves as control measured as the total asset of the companies, has indicated a significant negative coefficient with a beta coefficient of -2.0873, a T-value of -3.62, and a substantial level of (0.000) 1% threshold of less than (0.05). This means larger companies have a more excellent discretionary component of the accounting result. The R2 coefficient of 0.2216 indicates that 22.16% of the variability in EMT for Nigerian non-financial firms can be explained by FCF when moderated by IWN and ACI and controlled for firm size. This has aided in defining the joint effects of the independent variables. As for the Wald Chi (6) statistic, it is equal to 123.89 and is highly significant at the 1% threshold (p-value = 0.000).

DISCUSSIONS

The free cash flow of the listed non-financial companies shows a positive coefficient, though it is significant at 5% (.9233>2.28 = p-value = 0.022). The results are below what is predicted as the presence of excessive FCF in non-financial companies would induce the practice of EMT. Therefore, hypothesis H_1 confirmed the work of (Abdollahi & Rezaei Pitenoei, 2020). It also corroborates with the work of Afrizal et al. (2021), who found an insignificant impact between free cash flow and EMT practice. Institutional ownership shows a positive coefficient of .7245, a t-value of 2.92, and a significant relationship (p-value = 0.004). This is in line with the prediction that the presence of IWN in non-financial companies limits the practice of EMT in listed Nigerian companies. Therefore, hypothesis H_3 confirmed the work of (Parwar et al., 2021). This result disconfirmed the work of (Potharla et al., 2021), who found an insignificant impact between IWN and EMT practice. ACI has a significant effect on EMT levels. The result aligns with predictions found statistically significant with a coefficient of .1660, a t-value of 2.92, and a p-value of 0.024). As a result, hypothesis H_4 conforms to the work of (Suryanto, 2018; Alvarado et al., 2019). The finding explained that the practice of ACI is varied in companies. This conforms with Firnanti's work (2017).

From Table 2, it was argued that free cash flow, when interacting with institutional ownership, may reduce the EMT. This shows that institutional ownership is incentivized to monitor managers, with a coefficient of -.3.137 and a t-value of -5.42, significant at (0.000) less than (0.005). This finding agrees with the work of Al-Haddad and Whittington (2019) and Carina (2017). The Study confirmed the work of (Vince et al., 2016). When interacting with FCF, the independent audit committee has lessened the practice of EMT activities in non-financial companies; the ACI serves as an effective monitoring mechanism, particularly in non-financial firms interacting with free cash flow. With a beta coefficient of -.5.947, a t-value of -3.27, and a p-value of 0.000. The results are in agreement with those of (Taheri et al., 2014; Wahjuni & Fina, 2020; Shahwan, 2021)

CONCLUSIONS

The Study concludes that the EMT of manufacturing firms that were listed on the Nigerian Stock Exchange group is influenced by free cash flow. The firms may grow as the institutional shareholdings invest heavily in the firm through the good reports they obtained from independent audit committees, according to the Study's findings and results. Based on analysis data, FCF, IWN, and ACI, when interacting with FCF, have increased the significant positive relationship by 1% and 5% (0.022,0.004,0.024,0.000 and 0.0000), respectively, the level of the variables under consideration and reduced EMT and opportunist behavior of the manager. The Study aimed to consider the moderating effects of IWN and ACI on the relationship between excess FCF and EMT using listed manufacturing firms in Nigeria. The results show that, generally, FCF is one of the resources that trigger managers to engage in EMT to achieve their interests in the short term. Most of the study's results are consistent with previous studies; therefore, the study contributed by filling the gap of the inconsistency of previous studies about the relationship between FCF and EMT and the moderating role of IWN and ACI. The study result cannot be generalized to all sectors of the companies traded on the floor of the capital market, especially the financial sector. The inclusion of all sectors may differ with the use of manufacturing companies. Therefore, this serves as a limitation of the Study. The Study suggests that further research should be carried out using other constructions related to ownership and Governance on EMT by using the probability sampling technique to obtain a more representative sample and to extend the analysis that is not only limited to manufacturing firms but also all the sectors in the capital market. The result of the Study has significant implications for policymakers and practitioners as it discloses the link between FCF and earnings management. Also, using the manufacturing sector only for the study inference can be limited to the selected sample size to obtain more statistical robustness for the data analysis. Thus, future research may be carried out to cover all the sectors in the capital market to improve the generalizability of the results.

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