



POLAC MANAGEMENT REVIEW (PMR)
DEPARTMENT OF MANAGEMENT SCIENCE
NIGERIA POLICE ACADEMY, WUDIL-KANO



MODERATING ROLE OF OWNERSHIP STRUCTURE AND THE RELATIONSHIP BETWEEN INSTITUTIONAL OWNERSHIP AND EARNINGS MANAGEMENT OF LISTED MANUFACTURING FIRMS IN NIGERIA

Aliyu Mohammed	Department of Accounting, Nuhu Bamalli Polytechnic, Zaria, Kaduna State, Nigeria
Salisu Abubakar	Department of Accounting, ABU Business School, Ahmadu Bello University, Zaria Kaduna State, Nigeria
Luka Mailafiya	Department of Accounting, ABU Business School, Ahmadu Bello University, Zaria, Kaduna State, Nigeria
Aliyu Ahmed Abdullahi	Department of Accounting, ABU Business School, Ahmadu Bello University, Zaria, Kaduna State, Nigeria

Abstract

The study examine the moderating role of free cash flow and the relationship between institutional ownership and earnings management of listed manufacturing companies in the Nigerian Stock Exchange with specific objectives as to examine the impact free cash flow, institutional ownership and free cash flow as moderator. As a result of the mix finding the study introduced the use of moderating role of free cash flow on firm performance The study maintained a position of Agency theory which is used to pin the study. The population of the study comprises of 76 listed manufacturing companies in the Nigerian Stock Exchange between 1st January 2012- to 31st December 2022. Based on results obtained from inferential statistics performed, the study rejects the entire null hypothesis which stated that free cash flow, free cash flow moderated with institutional ownership and firm size has significant positive impact on firm performance of listed manufacturing firms in Nigeria. The study concluded that institutional shareholders in firms used to reduce the opportunistic behaviour of managers towards earnings management through their active monitoring. The study therefore recommends that the presence of ownership structures such as institutional shareholders in the manufacturing firms may have the potentials in preventing the managers from using their discretion to commit earnings management. In line with the result of the study FCF when moderated with MGW may influence the relationship between MGW and EMT. Therefore, when their relationship is monitored and moderated from time to time it may strengthen their influence over managers in the manufacturing firms that engage in opportunistic behaviour.

Keywords: Free Cash Flow; Institutional Ownership, Return On Assets.

1. Introduction

Free cash flow (FCF) is a measure of how much money is left over after a firm has completed what it considers to be profitable projects. It is employed to persuade business firm management to display a behavioural pattern that could have a major negative impact on their ability to survive and be profitable. Jensen (1986) was the first to introduce the idea of FCF, which has since raised questions in the field of financial research. Its

presence in a company has been cited as one of the factors that affect how managers act toward their organizations, either favourably or unfavourably

In recent times, studies of Marista and Mochamad (2019), Isam, Malik, and Fadi (2020), Martdian et al. (2021), Muhammad et al. (2021), Kargi & Zakariya (2021), Jevri and Rindu (2021) have shown that managers' opportunistic behaviour largely depends on the ownership structure and features of the firm, which

serves as the determinant of the margin of discretion that guides the surplus funds' (Fabricio, Cardoso & Atidelmo, 2014). In manufacturing companies, Institutional shareholders are deemed one of the most significant categories of shareholders that can monitor and constrain the activities of the managers. Institutional shareholders are considered to be influential especially the transient shareholder so that they can protect the minority holders' which suffer from any legal protection. This is because transient shareholders may have a direct impact on managers' propensity in managing the company earnings. They also, indirectly reduce the free cash flow that will be left for managers to misappropriate (Mehdi, Ines, Tawhid & Faten, 2016; Iskandar-Datta & Jia, 2012).

Academics, professionals, and legislators are now concerned about the manipulation of financial statements. The corporate party has engaged in the manipulation of financial figures even when there are crisis periods over the period of 1997–1998, 2007–2011 and 2016. Studies have demonstrated that bad corporate governance is thought to be the cause of the practice of financial report falsification. Since 2002, numerous industry sectors, particularly those in the manufacturing sector, have established Good Corporate Governance.

One of the major goals of EMT should be to pursue continual growth of the firm as well as the maximization of the interest of its stakeholders. However, due to the manager's interest in firm, literature has indicated that reports are expected to provide a fair view of the firm's financial position and performance over the years (Uwuigbe, Ranti & Bernard, 2015). Also, the public especially the shareholders have lost confidence and trust in the integrity of accounting information after the global corporate financial misdeeds around the world, and that led to growing attention by researchers on the quality of earnings (Al-Dhamari & Ismail, 2014). The opportunistic behaviour of managers has brought down big corporations which were earlier considered "too big to fail" to a state of total collapse.

Evidence of the collapse of such financial giants includes, firstly, the case of Xerox in the year 2000 in which it was reported that the company overstated its profit by about \$1.4 billion over four years.

Regrettably, Xerox was just one among many firms, whose scandals were subsequently publicized between 2001 and the enactment of the Sarbanes-Oxley Act of 2002. The case of WorldCom has been widely circulated to be the largest of the financial scandal with an estimated loss of about \$180 billion. These corporations initially commanded strong financial respect by their appearance to have provided good financial performance, however, it was later discovered that they were indulged in EM in order to show that the company show good financial outcomes (Litt, Sharma & Sharma, 2013).

The foundation of this study should be predicated upon the fact that free cash flow has been indicated as the excess of cash available for funding any future profitable projects. It is described as the relationship between excess FCF and good opportunities for growth that the company utilizes in generating future income through projects that have NPV. Thus, the connection between free cash flow and EMT is expected to be moderate by different groups of owners such as ownership structure which is proxies by the independent institutional ownership. In view that excess FCF, institutional owners will apply the necessary measures to prevent managers' opportunistic behaviours concerning EMT. Empirical evidence has shown that the role played by the ownership may decline the undesirable impact of high free cash flow in inducing the managers to engage in EMT through institutional monitoring of managers indulging in opportunistic behaviour of managers (Jensen & Meckling, 1976). Consequently, by controlling the manager's performance, agency costs that would arise as the result of information asymmetry through the ownership structure would reduce EMT (Watts & Zimmerman, 1983).

The moderating variable is considered as the interacting variable that affects the strength of the connection between the various proxies of independent and dependent variables (Matthew & Ann, 2017). Studying the connection between the independent variables and the dependent variable and the moderators may affect their relationship (Baron & Kenny, 1986; Kim et al., 2001). Therefore, this research introduced institutional ownership (IWN) as moderating variable that link FCF and EM. The aim of introducing the moderating

variables is as a result of the fact that it will strengthen the relationship which may be measured scientifically (Baron and Kenny, 1986; Fairchild et al., 2009; Ahmed & Manab, 2016).

The free cash flow in the Nigerian manufacturing firm is associated with earnings management as can be depicted from the nature of their annual report. (Dabari & Saidin, 2016). Thus, studies have shown that there are factors that influence IWN in manufacturing firms (Potharla, Bhattacharjee and Iyer, 2021). This study indicates FCF may affect IWN and also employed different measures in investigating the level of IWN. Therefore, consistent with Baron and Kenny (1986), IWN introduced in the present research as moderating variables with the notion that it would strengthen the association between FCF and EMT. Thus, the moderating variable is one of the variables that change the direction and strength of a relationship between independent and dependent variables (Sekaran & Bougie, 2016; Matthew & Ann, 2017). Hence, IWN can, therefore, fit in as a moderating variable that would produce better results.

The unethical accounting behaviour of professional accountants worldwide has been attributed to board of director's members in most big corporations and has led to their collapse and takeover has attracted so many questions about the validity of the accounting field and the effectiveness of governance structures that were designed to monitor corporate boards. In Nigeria, the financial scandal that was witnessed is that of Cadbury, Lever Brothers, Oceanic Bank, Afribank, Intercontinental Bank among others (Enofe, Mgbame, Otuya & Ovie, 2013). In most cases, it has been the issue of cooking the books to mislead the gullible stakeholders. The accounting profession that supports judgments concerning the preparation of financial statements includes the International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) which in Nigeria have given the managers opportunities of chosen the reporting methods they want to adopt and this room has to give rise to earnings management.

Also, it was discovered that some bank managers were involved in serious financial crimes such as the Chief Executive Officers (CEO) of the Fidelity Bank Plc

were engaged in window dressing to the tune of 115 million dollars. Also, Sterling Bank, First Bank, and Access Bank (CEO) were involved in fraudulent and even the three Tier 1 banks and 4 other Tier 2 banks were engaged in window dressing, creative accounting, and insider trading to deceive investors and prospective investors all this affects the manufacturing companies negatively (Insight, 2016; Sun 2016). Others include the Petroleum Industry which contributes nearly 90% of the Nation's foreign exchange earnings has been identified with severe allegations of financial misconduct recently. The main objective of this study is to examine the impact of FCF and EMT of listed manufacturing companies in the NSE.

2. Literature Review

2.1 Conceptual Issues

Concepts of Earning Management

According to Amin et, al., (2018) Earnings management may occur in a situation whereby there is asymmetry information that arises as a result of moral hazard, this may encourage management to do earnings management. While Healy and Wahlen (1999) investigated the reason why managers use judgment in the concerning how financial position of the company is prepared with the aim of structuring the transactions to alter the financial report.

Concepts of Free Cash Flows

Alzoubi (2016), states that managers may sometimes engage in an unprofitable venture as a result of 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 Mehdi, Ines, Tawhid, and Faten (2016), free cash flow is viewed as any amount of excess or surplus funds available when all profitable projects have been funded by the management. Also, they refer to free cash flow as the internally generated capital or revenue that can be used in funding any project that would yield more profit.

Concept of Institutional Ownership

In the word of Nico (2021) who stated that IWN simply refers to the company shares owned by institutional investors like insurance companies, financial institutions, pension funds, and other companies. Mohammad and Azam (2014) 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 opportunistic behaviours by managers. From their evidence, it indicated that transient institutional shareholders may force the managers to focus on economic performance which prevents opportunistic behaviours. It is since institutional share has the incentive to monitor the EMT performance because of their position.

Concept of Firm Size

According to Obae, Abdullahi, and Ude (2021) Firm size is define as the sum of total assets, total investment, and net worth of the firm among others. While, Aifuwa and Embele, (2019) opined that firm size is one of the variables that has significant influence on firm's performance and the firm's value either directly or indirectly. Firm size can be assessed using the total assets, income or capital of the company.

2.2 Empirical Review

Free Cash Flow and Earnings Management

Ahmad and Yasser (2020) investigated the relationship between surplus FCF and EMT, the study using auditor size as the moderates where the study used 103 firms listed on the Tehran Stock Exchange over the period 2013 to 2017. In analyzing the data, a simple multiple regression model based on panel data techniques were employed. The results of the study indicate that EMT is significantly related to surplus FCF. Thus, the results also indicate that auditor size shows an insignificant relationship between surplus FCF and corporate EMT.

Susanto and Bosta (2019) examine the relationship between FCF, MGW on EMT. The data were analyzed through the use multiple regression. Thus, the study used 240 manufacturing firms from the Indonesia Stock Exchange over the period 2014 to 2016. The result of the study shows indicates that FCF have significant

influence on EMT. While, MGW has insignificant influence on EMT.

Chung, Firth, and Kim (2005) conducted a similar analysis on the association between earning EMT, surplus FCF, and external monitoring using a sample of 22,576 American companies covering the years 1984–1996. Their findings show a substantial positive correlation between EMT and FCF. Mehdi, Amir, and Alireza (2016) looked at how FCF and EMT related in businesses listed on the Tehran Stock Exchange. Between 2010 and 2012, 67 firms made up the population. More than 341 organizations from 37 industries were included in the study. The Cochran technique and the Dickey-Fuller test are both used in the study. From a total of 341 firms, the analysis uses 76 companies. The result of the study shows there is a significant relationship between FCF and EMT. As a result, they also look at how high audit quality and audit firms affect earning EMT. According to the study's findings, the link between EMT and FCF has significantly decreased, making it harder for managers to manipulate the profits of their companies.

Institutional Shareholding and Earnings Management

Debnath, Chowdhury, and Khan (2021) investigate the association between IWN and real EMT using 2195 firms listed on the Dhaka Stock Exchange between 2000 to 2017. The study used panel least squares regression in data analysis and the result of the study indicates that IWN is positively related to real EMT. Muhammad, Shahzad, Abdul, Qaisar, and Muddasir (2021) investigate the relationship between IWN and EMT practices of 206 listed companies in Pakistan over the period 2013 to 2018. The data was analyzed by adopting the Kothari et al. (2005) model as the measure of EMT practices. The findings of the study show that IWN have a negligible impact on EMT practices in Pakistan. Nitai, Suman, and Safaeddaman (2021) evaluated the relationship between IWN and real EMT using 2195 firms listed in Bangladesh over the period 2000–2017. The study used panel least squares regression, which indicates that institutional ownership has a significant positive relationship with real EMT. Srikanth, Kaushik, and Vishwanathan (2021) evaluate the relationship between IWN and EMT using

3,165 non-financial listed companies in India over the period 2011 to 2018. The study used multiple regressions for data analysis. The results reveal that IWN has a significant negative impact on EMT.

Al-Haddad and Whittington (2017) investigated the impact of corporate governance mechanisms using board characteristics, ownership structure, and real activities based on accrual-based EMT of listed manufacturing companies in Jordan. The study uses the firms after the code corporate governance was introduced in 2009. The results of the study indicate both IWN and MGW may use real and accrual earnings manipulations. In addition, when it comes to governance, the independent directors and largest shareholders prefer using real activity-based and accrual EMT to try to manipulate the company's resources.

Allahkaram, Sajjad and Marzieh (2017) investigated the relationship between FCF and EMT on the financial health of the company. Therefore, FCF is considered strong stimuli in triggering managers to engage in EMT using Tehran Stock Exchange. Thus, it shows that the moderating effect of using IWN and the board independence on the relationship between excess FCF and EMT have yielded results throughout 2009 to 2015. The results of the research indicate that there is a significant positive relationship between IWN, board independence, and surplus FCF and EMT.

Firm Size and Earnings Management

Samuel et al., (2015) examined firm characteristics and corporate cash holdings using a sample of 156 firms selected using a stratified random sampling technique. FMS is an important determinant of cash holdings; however, the expected relationship used to be ambiguous. Similarly, FMS may be related to potential agency problems, analyst coverage and monitoring by the market for corporate control of the managers. Furthermore, there are substantial fixed costs of acquiring outside financing as well as economies of scale in cash management, since both mature and larger companies prefer to get financing in an easier and cheaper way. Although larger firms are more diversified than the smaller firms, they can by far get easily bank financing and access to capital markets than the small firms which help them minimize the

borrowing cost and less likely to go bankrupt. More so, they face fewer financial constraints. Hence, large firms are less likely to stockpile cash reserves. Therefore, in this study, there is a negative relationship between FMS and cash balances.

Reza and Ghodratalah (2016) examined the relationship between FCF and EMT using a sample of 104 companies listed on the Teran Stock Exchange over the period 2009-2013. The managers are motivated to engage in opportunistic behaviour once the size of the company is large. Therefore, base on their assertion the larger the size of the company the higher the EMT, while the smaller the size the less the opportunistic behaviour the managers tend to engage in the act. Thus, there are those that are of the opinion that the larger the size of the firm the smaller the opportunistic behaviour the managers engaged in EMT. In their study, they used the logarithm of the total book value of the company assets as the determinant of the size of the company.

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

In most cases, the introduction of the code of corporate governance all over the world 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 manufacturing enterprises, Al-Haddad and Whittington (2017) investigated the impact of IWN as interacting variable that connected FCF and EMT. The study's findings show IWN considerably moderates the link between FCF and real and accrual earnings manipulations.

Allahkaram, Sajjad, and Marzieh (2017) used listed firms on the Tehran Stock Exchange from 2009 to 2015 to study the relationship between FCF and EMT moderating role of IWN. Thus, the moderating effect of IWN between excess FCF and EMT has indicated significant positive relationship effect.

The separation of ownership functions in companies has become more susceptible to agency conflict, this happens as a result of the position of the managers who serve as a manager of internal information. Carina and Asparagina (2017) examine the effect of IWN on EMT

using IWN as an interactive variable. The study uses 13 companies quoted on Indonesian capital market from 2008 to 2011, the results of the study showed that IWN when interacted has significant effect on EMT.

Mehdi, Ines Fakhfakh, Tawhid, and Faten (2016) analysed the moderating effect of ACI and IWN on FCF and EMT. In the course of their study, they noticed that institutional investors used to allocate a huge amount of resources for corporate control. As a result of the huge amount of money they have, they used to hire the services of an expert in measuring the value of their investment. This has helped the firms in controlling the FCF and protecting the interests of other shareholders. Concerning the theory, it helps the agency cost theory by minimizing the conflict that may arise between the shareholders and the managers of the companies. Therefore, using 789 unbalanced data of 85 manufacturing firms listed on Autorite des marches financiers over the period 2001-2010. The finding of the study indicated a significant positive association with FCF and EMT when moderated with institutional ownership.

Vince, Mohamad, and Oluwatoyin (2016) examine the influence of IWN and MGW on EMT. The study was carried out by using 115 manufacturing companies quoted on the Indonesian capital market over the period 2008 to 2012. They considered the efficient monitoring hypothesis and suggest that for this study insignificant association with IWN and EMT. This negates the hypotheses that stated that IWN inhibits managers to engage opportunistically in EMT. Therefore, the findings of the study imply that IWN affects EMT practices. Thus, IWN moderate the relationship between FCF and EMT.

2.3 Theoretical Framework

Agency Theory

In manufacturing companies and firms, in general, the major sources of conflicts are the interest managers want to play to outsmart the shareholders, especially whenever there is FCF. This is cash that was left available after profit has been declared and all forms of dividing paid. Jensen (1986) stated that managers sometime misused the FCF that remain after paying for dividends and tax. This indicates that FCF left has not

been invested in a project that will yield positive net present value.

However, Fatemeh et al. (2014) stated that managers can invest FCF in the project that has negative NPV the reason being for them to obtain short-term personal interest. Therefore, this may be seen as how high FCF is used to cause agency problems between managers and shareholders as a result of managers trying to satisfy their own interest. 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 FCF with higher growth opportunities.

Conversely, this aforementioned situation may lead the firm to repurchase its share by carrying out a related party transaction with references shareholders. This kind of behaviour may in one way or the other affects the firm financial position which may lead to low stock price. To correct the situation, managers may manipulate earnings by overlooking available mean of using discretionary funds in order to facilitate their private gain. The study carried out by Jaggi and Gul (2006) had it that, there is always a significant relationship between FCF and EMT. They asserted that as a result of a high level of FCF, managers often engage in manipulating earnings to using 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. Therefore, based on all the aforementioned, agency theory is used to solve the problem that may arise between the managers and shareholders as a result of the high FCF that triggers opportunistic behaviour.

3. Methodology

This study uses a correlation research design, The population comprises of 76 listed manufacturing companies in the Nigerian Exchange from January 2012 to 31st December 2022. The study adopts the Kothari, Leone, and Wisely (2005) model. Thus, the selection of the quoted companies was a result of the sufficient data and the stringent disclosure requirements of the law (Tahir, 2008). The sample was drawn by ensuring that adequate attention is paid in coming up with the sample size and by considering the nature of

the population. Also, in arriving at the sample size simple criteria was adopted through the use of purposeful random sampling technique.

- The data for the company's annual report and account must be complete before it forms part of the sample size.
- The companies must be quoted on the Nigerian exchange group before the beginning of the study period.
- The company must not be delisted within the period of the study.

Based on the fact that thirty-nine (39) companies formed the sample size, all the companies are quoted within the period of the study. To evaluate the impact of FCF and EMT of quoted manufacturing firms in Nigeria, the study used multiple regression analysis as technique in analysing the data.

3.1 Measurement of Variables Employed in the study is shown below.

Table 1: Selected variables, definitions, and measures

Variable acronyms	Definitions	Measures
EMT	Real Earning Management Metric Abnormal Discretionary Expenses plus	Abnormal Cash flow plus Abnormal Production. Braam et, al.(2017) and Baatour et, al.(2015).
FCF	Free Cash Flow Level	Operating cash less tax less interest expenses less total Dividend scale by sales Wang (2010) and Yero & Shehu (2015).
IWN	Institutional Ownership	Cumulative Percentage of shares exceeding 5% held by Institutional Investors (Gregory & Wang (2013).
FMZ	Firm Size	Natural logarithm of total assets. Jaggi&Gul, (1999)

Sources; Compiled by Author from Various Literature (2022)

3.2 Model Specification

The study used two models the first model is considered as functional model, while the second model (OLS) was

derived from EMT model. Measuring EMT – the study used Real Earnings Management Metric by Braam et, al. (2017) and Baatour et, al.,(2015)

Abnormal Cash flow (Ab_CFO)

$$\frac{CFO}{Assets_{it-1}} = \alpha_0 + \alpha_1 + \left(\frac{1}{Assets_{it-1}}\right) + \beta_1 \left(\frac{Sale_{it}}{Assets_{it-1}}\right) + \beta_2 \left(\frac{\Delta Sale_{it}}{Assets_{it-1}}\right) + e_{it} \dots\dots\dots (1)$$

Abnormal Discretionary Expenses (Ab_DISEXP)

$$\frac{DISEXP}{Assets_{it-1}} = \alpha_0 + \alpha_1 + \left(\frac{1}{Assets_{it-1}}\right) + \beta_1 \left(\frac{Sale_{it-1}}{Assets_{it-1}}\right) + e_{it} \dots\dots\dots (2)$$

Abnormal Production (Ab_PROD)

$$PROD_{it} = \alpha_0 + \alpha_1 + \left(\frac{1}{Assets_{it-1}}\right) + \beta_1 \left(\frac{Sale_{it}}{Assets_{it-1}}\right) + \beta_2 \left(\frac{\Delta Sale_{it}}{Assets_{it-1}}\right) + \beta_3 \left(\frac{\Delta Sale_{it-1}}{Assets_{it-1}}\right) + e_{it} \dots\dots\dots (3)$$

Therefore, $REM = Ab_PROD + Ab_CFO + Ab_DEXP$ (4)

where Ab_CFO = Abnormal cash flow is the differences between actual cash flow (ACFO) and normal cash flow (NCFO).

Ab_DISEXP = Discretionary expenses is the sum of selling, general and administrative expenses, research and development and advertisement expenses (differences between the actual discretionary expenses and the normal discretionary expenses = Ab_DISEXP).

Ab_PROD = Abnormal Production is the total cost of goods sold (COGS) and change in inventory ($\Delta Inv.$) for the year i.e. the disparity between the actual and normal production cost equals Ab_PROD . The resulting regression residual represents real EMT.

$Sales_{it}$ = existing year sales

$\Delta Sales_{it}$ = existing year's sales less previous year's sales

ϵ_{it} = error terms

-1 = Ab_CFO residual is multiply by -1, low cash flow from operation signifies real earnings management and

when multiply by Ab_DISEXP shows the final Ab_DISEXP .

All variables in the model are deflected by total assets ($t-1$) so that the problem of heteroscedasticity would be reduced. To estimation the accru, the study adopts Hribar and Collins's (2002) approach.

$$EMT_{i,t} = \beta_0 + \beta_1 FCF + \beta_2 IWN + \beta_3 FMS + e_{i,t} \dots (5)$$

Where:

EMT_{it} = discretionary accrual

FCF = free cash flow

IWN = institutional ownership

FMS = Firm Size (control variable)

(Mehdi, Ines, Tawhid and Faten, 2015)

$$EMT_{i,t} = \beta_0 + \beta_1 FCF + \beta_2 IWN + \beta_3 FCF * IWN + \beta_4 FMS + e_{i,t} \quad (6)$$

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

- i.) It has advantage of testing the relationship between two variables.
- ii.) The technique is useful in assessing the policy implication of the findings which is part of the main focus of the study.

4. Result and Discussion

Table 2: Descriptive Statistics

Variable s	Obs	Mean	Std-dev.	Minimum	Maximum	Skewness	Kurtosis
EMT	429	.5183	.4718	-1.019	.9986	0.0022	0.0000
FCF	429	.9211	.0568	.6793	.9999	0.0000	0.0323
IWN	429	.3135	.0807	.0028	.4159	0.0000	0.0000
FCFIW N	429	.0665	.0353	.0002	.2597	0.0000	0.0000
FMS	429	.0443	.0377	.0000	.3132	0.0000	0.0000

Source: Computed and Compiled by Author, 2022

The mean value of EMT that was obtained through discretionary accruals is .5183, this shows that from the above data the mean value of .5183 is more than STD-DEV .4718. Although considering the range their values are not too far apart, this indicate that the Mean of .5183 represents the data well with the minimum and maximum value of (-1.019 and .9986). The standard deviation STD-DEV of free cash flow revealed that .0568 is less than one, therefore, the variation of the

data value are high as reflect by the average value of .9211, this simply show that it can represent the whole data as the STD-DEV value is very small when compared to the Mean value and the minimum and maximum value of (.6793 and .9999).

The institutional ownership deviated from the standard deviation by .3135 and the standard deviation STD-DEV worth .0807. This indicated that the means

value is small compared with the mean. That means the value can reflect the average value of data deviation of .066, so it can be used to represent the whole data as the STD-DEV value is less compared to the Mean value with the minimum and maximum value of (.0028 and .4159). The interaction between free cash flow and institutional ownership on EMT has a standard

deviation STD-DEV that worth .0353 and it is less than mean value of .0665, on the other hand it reflect the average value as the data deviate with the average value .0665. this also show that it can be used to represent whole data as the STD-DEV value is very small when compared with the Mean value with minimum value of (.0002 and .2597)

Table 3: Correlation Matrix

Variable	EMT	FCF	IWN	FCFIWN	FMS
EMT	1.000				
FCF	0.0808	1.000			
IWN	0.1384*	-0.0718	1.000		
FCFIWN	0.3519	0.0334	0.1083*	1.000	
FMS	-0.2828*	0.0403	-0.1047*	0.2724*	1.000

Source: Computed and Compiled by Author, 2022

The result of regression on the effect of free cash flow 0.0808, institutional ownership 0.1384* and free cash flow when institutional ownership -0.3519*, this indicates that large firms 0.2828* sometime used to engage in positive EMT as their coefficient is significant and positive at 1% level. This is done by managers with aim of meeting debt covenant and increasing their bonuses. The coefficient of IWN index does not exhibit a significant relationship with EMT. Thus, the relationship between free cash flow and institutional ownership show a reduction in earning management as it is negative (-0.0718) Table 3 also shows that the introduction of the moderating role of ownership that is institutional ownership has indicated that FCF has improve the coefficient of FCF and IWN as the coefficient is negative revealed that the presence of institutional shareholders has aid in reducing the

earnings management with the value of -0.3519. also the relationship between free cash flow when moderated with institutional ownership depict that a positive relationship which means despite the presenmce of institutional ownership, the manager used to engage in the positive earnings management this can be seen from the values of (0.0334 and 0.1085).

4.1 Regression Result

Table 4 presents the result of the dependent variable, EMT and independent variables (FCF, FCF*IWN, IWN, FMS, and EMT) of the study. This is followed by the analysis of the association that exists between the dependent and independent variable through beta coefficient, t-value, p-value, coefficient of determination R^2 .

Table 4: Regression Analysis

Variable	Coeff,	T-value	P-value	VIF	1/VIF
EMT	-.2599	-0.68	0.496		
FCF	.9189	2.24	0.025	1.01	0.992646
IWN	-3.9842	-6.62	0.000	1.04	0.963795
FCFIWN	.9493	3.94	0.000	1.10	0.963795
FMS	-2.279	-3.85	0.000	1.10	0.907163

Source: Computed and Compiled by Author, 2022

Free Cash Flow and Earnings Management

The hypothesis one show that FCF has influences on EMT this could be seen from the variation of when there is an increase in free cash flow by 92%, it will results to the increase in earning management by 22%

and the significant of level of (0.025) provide us with sufficient evidence of rejecting the null hypothesis one of the study.

Institution Ownership Free Cash Flow and Earnings Management

The hypothesis states that "IWN has significant influence on EMT. The results of the study show that despite the 39% reduction in the shareholding of the institutional ownership, it has resulted to 66% reduction in the earnings management being perpetrated by the managers and the significant level of (0.000)1% provide us with evidence of rejecting the hypothesis of the study.

Institution Ownership moderated by Free Cash Flow has no significant relationship with Earnings Management

As the coefficient of institutional ownership moderated by free cash flow is 45% and t-value is 39% this shows that free cash flow and institutional shareholders has significant influence on earnings management. This means when there is an increase in the coefficient of FCFIWN by 45% it would results to the increase in earning management by 39%. This means that a significant level of (.000) provide evidence of rejecting the null hypothesis of the study.

The R^2 the coefficients of determination assess the quality of the model as R^2 is 0.1967 in explaining the variability in EMT of Nigerian manufacturing firms can be explained by the level of FCF when moderated with IWN and firm size which is control by company's size. This has aid in explanation the joint effects of the independent variables and is highly significant at the 1% threshold (p-value = 0.000).

4.2 Discussion of Findings

The free cash flow of the listed manufacturing companies shows a positive coefficient, though it is significant at 5% (.9189 > 2.24 = p-value = 0.025). The results are under what is predicted as the presence of excessive FCF in the manufacturing companies would induce the practice of EMT. Therefore, hypothesis H_1 confirmed the work of (Ahmad and Yasser (2020), Susanto and Bosta (2019).

Institutional ownership shows a negative coefficient -3.9842 and t-value of -6.62 and insignificant relationship (p-value = 0.000). This is in line with the prediction that the presence of institutional ownership

in the manufacturing companies' has reduced the practice of EMT in listed Nigeria companies. Therefore, hypothesis H_2 of the study confirmed the work of Debnath, Chowdhury, and Khan (2021), Muhammad, Shahzad, Abdul, Qaisar, and Muddasir (2021) From Table 2, it was argued that free cash flow when interacted with institutional ownership may increase the EMT this shows that managerial ownership has an incentive of monitoring managers, with the coefficient of .9493 and the t-value of 3.94 which is significant at (0.000) less than (0.005). This finding is in agreement with the work of Ahmad and Yasser (2020), Susanto and Bosta (2019).

5. Conclusion and Recommendations

This study examined the effect of FCF on EMT and moderating role of ownership. Based on data analysis, institutional ownership and also when interacting with free cash flow has increased the significant level of the variables under consideration and reduced EMT and opportunist behaviour of the manager. The results show that generally FCF can be considered as one of the resources that trigger managers to engage in EMT to achieve their interests in the short term. Most of the results of the study are consistent with other studies carried out previously; therefore, the study contributed by filling the gap of the inconsistency of previous studies about the relationship between FCF and EMT the moderating role of ownership. Based on the result of from hypothesis one, the study recommended that there is a need to have the presence of FCF in the manufacturing firms so that the propensity of corporate executives may use their discretion to invest them in the project that has a positive net present value as they can be effectively monitored by institutional owners and at the same time governance mechanisms like audit committee independence.

From the result, it was recommended that the presence of ownership structures such as institutional shareholders in the manufacturing firms may have the potentials in preventing the managers from using their discretion to commit earnings management. In line with the result of the study FCF when moderated with MGW may influence the relationship between MGW and EMT. Therefore, when their relationship is monitored and moderated from time to time it may strengthen their

influence over managers in the manufacturing firms that engage in opportunistic behaviour. It was recommended that the size of the firm has a strong influence on monitoring the FCF that may increase the practice of EMT. Therefore, with the presence of ownership

structure such as institutional shareholders, it must be strengthened so that it can weaken the practice of negative EMT when there is excess FCF in the manufacturing firms.

References

- Ahmad A. T. and Sofri Y. (2017) Stock Market Segmentations, Free Cash Flow and Earnings Management: The Roles of Moderating Independent Audit Committee and Audit Quality. *Global Business and Management Research: An International Journal* Vol. 9, No. 4 (2017).
- Ahmad A., Yasser R. P. (2020) Surplus Free Cash Flow and Earnings Management: The Moderating Role of Auditor Size. DOI: 10.22034/amfa.2019.583498.1167.
- Ahmed, I., & Manab, N. A. (2016a). Moderating role of board equity ownership on the relationship between enterprise risk management implementation and firms performance: A proposed model. *International Journal of Management Research and Reviews*, 6(1), 21.
- Aifuwa, H. O., and Embele, K. (2019). Board characteristics and financial reporting quality. *Journal of Accounting and Financial Management*, 5(1), 30-49.
- Al-Dhamari, R., & Ismail, K. (2014). An investigation into the effect of surplus free cash flow, corporate governance and firm size on earnings predictability. *International Journal of Accounting and Information Management*, Vol. 22 No. 2, pp. 118-133.
- Al-Haddad L. and Whittington M. (2017) The impact of corporate governance mechanisms on earnings management practices: evidence from Jordan world academy of science, engineering and technology. *International Journal of Humanities and Social Sciences* 11, (7), 112-129.
- Allahkaram S., Sajjad M. and Marzieh A. (2017) *The Relationship Between Excess-Free Cash Flow and Earnings Management*. *Advances in mathematical finance & applications*, 2 (3), (2017), 91-105.
- Alwan, T..(2020). "The Effect Of Profit Growth , Firm Size , And Liquidity", Vol 14, No. 2: 260–68.
- Alzoubi E. and Saleem S. (2017), Audit quality, debt financing, and earnings management: Evidence from Jordan. *Journal of the Chinese Institute of Chemical Engineers*
- Alzoubi, E. (2018), "Audit quality and earnings management: evidence from Jordan", *Journal of Applied Accounting Research*, 17(6) 170-189.
- Alzoubi, E., (2016), "Ownership Structure and Earnings Management: Evidence from Jordan. *International Journal of Accounting and Information Management*, 24(2): 135-161.
- Amin A, Niki L., Djoko S. and Erna S.. (2018), "Audit Committee Characteristics and Audit Earnings Quality: Empirical Evidence of the Company with Concentrated Ownership", *Review of Integrative Business & Economics Research*, Vol. 7 (Supplementary Issue 1). pp. 18-33.
- Azam S. T. Sadat N. and Torabi U. (2014). The monitoring role of institutional ownership on the relationship between free cash flow and assets efficiency. *International Journal of Finance and Accounting* 3(4): 266-275.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Baatour, K., Othman, H. B., & Hussainey, K.(2017) "The effect of multiple directorships on real and accrual-based earnings management," *Accounting Research Journal*, vol. 30, no. 1, 00-00, 2017. DOI: 10.1108/ARJ-06-2015-0081
- Braam, G., Nandy, M., Weitzel, U., & Lodh, S, (2015) "Accrual-based and real earnings management and political connections," *The*

International Journal of Accounting, vol. 50, no. 2, pp. 111-141, 2015.

- Carina H. and Asparagina P. (2017) good corporate governance on the earnings management using ISO9001 as a moderating variable in companies in Indonesia. *Advances in Economics, Business and Management Research*, volume 40. 2nd. *International Conference on Accounting, Management, and Economics*.
- Chung, R., Firth, M. & Kim, J.B. (2005), *Free cash flow Agency Costs, Earnings Management and Investor Monitoring*, *Corporate Ownership and Control*, 2,(1) 51–61.
- Cohen, D. A., Dey, A., & Lys, T. Z (2008), “Real and accrualbased earnings management in the pre- and postSarbanes-Oxley periods,” *The Accounting Review*, vol. 83, no. 3, pp. 757-787, 2008. <https://www.jstor.org/stable/30244500>
- Copeland, T. E., Weston, J. F & Shastri, K. (2005). *Financial Theory and Capital Policy* Boston. MA, Addison-Wesley. 24,(4) 99–129
- Copeland, T. E., Weston, J. F. & Shastri, K. (1995). *Financial Theory and Capital Policy*, Boston, MA, Addison-Wesley.
- Dabari, I. J., & Saidin, S. Z. (2016b). A Moderating Role of Board Characteristics on Enterprise Risk Management Implementation: Evidence from the Nigerian Banking Sector. *International Journal of Economics and Financial Issues*, 6(4S).
- Debnath, N. C., Chowdhury, S. P., & Khan, S. (2021) Ownership structure and real earnings management: An empirical study on the emerging economy. *Corporate Ownership & Control*, 18(2), 74-89. <http://doi.org/10.22495/cocv18i2art6>.
- Dechow P. M. Sloan R. G. & Sweeny A. P. (1995). Detecting earnings management. *The Accounting Review*, 70, (2) 193 – 225.
- Dechow, P. & Skinner, D., (2000). Earnings management: reconciling the views of accounting academics, practitioners, and regulators. *Journal Accounting Horizons* 14, 235–250.
- Fabricio, T., Cardoso, A. & Arideldo, J., (2014). Free cash flow and earnings management in Brazil: *The Negative Side of Financial Slack*. *Global Journals Inc. (USA)* 6 (3) 8-11.
- Fatemeh, T., Seyyed Y. A. & Malek N., (2014). The impact of institutional ownership and managerial ownership, on the relationship between free cash flow and asset utilization. *Indian Journal of Fundamental and Applied Life Sciences* 5 (4) 895-900.
- Hamid, D., Attaillah J., Y., Shafiq, L. and Amir C. (2011). *Mengungkap Manajemen Laba dan Skandal Akuntansi*. Salemba Empat, Jakarta.
- Hamid, S., & Nassin M. (2014). *Persistence of Firm-Level Profitability in the European Dairy Processing Industry*. *Agricultural economics*, 45,(5) 53-56.
- Hamisu S. K. and Musa Z. (2021) Moderating Effect of Free Cash Flow and Managerial Ownership on Earnings Management of Listed Conglomerate Firms in Nigeria. *Accounting and taxation review*. *Accounting and taxation review*
- Hossein F., Isfandyari M., Mohammad K. Ali B. & Narjes K.J. (2011). Free Cash Flows-information Relevancy income Management. *Journal of Accounting and Economics*, 3(3), 183-199.
- Hossein, F. (2014). Free cash flows- information relevancy income management. *Journal of Accounting and Economics*, 7(1-3), 85-107.
- Isam S., Malik A. A. and Fadi H. (2020) Financial Factors Affecting Earnings Management and Earnings Quality: New Evidence from an Emerging Market. *ACRN Journal of Finance and Risk Perspectives* 9 (2020) 198-216. journal homepage: <http://www.acrn-journals.eu>.
- Iskandar-Datta, M.E. & Jia, Y. (2012). Cross-country analysis of secular cash trends. *Journal of Banking & Finance*, 36,(8) 898–912.
- Jaggi, B. & Gul, F.A. (2006). *Evidence of accruals management: A Test of the Free Cash Flow and debt monitoring hypotheses*. Working paper, <http://ssrn.com/abstract=2699>.
- Jahanzaib H., Akbar A. & Tahira S. (2014). Earning management and dividend policy: empirical evidence from Pakistani listed companies. *European Journal of Business and Management* 4,(1) 32-52 www.iiste.org.
- Jensen M. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review*, 76(4) 323–329.

- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behaviour, Agency Costs, and Ownership Structure 6(2) 163-231. *Springer Netherlands*.
- Jensen, M.C. and Murphy, K. J. (1990), Performance pay and top-management incentives, *Journal of Political Economy*, 98, (3) 225–264.
- Jesen, M.C. & Meckling, M. (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3,(2) 306-360.
- Jevri A. and Rindu R. G., (2021) the effect of earnings management on firm value with corporate governance as a moderating variable. *International Journal for Innovation Education and Research* ISSN 2411-2933 01 February 2021.
- Jones, J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29, (2) 193-228.
- Kargi, H.S., & Zakariya, M. (2021). Moderating effect of free cash flow and managerial ownership on earnings management of listed conglomerate firms in Nigeria. *Accounting and Taxation Review*, 5(2): 30-52. Available online at <http://www.atreview.org>.
- Khosrran E. (2011). An empirical investigation of earnings management in the MENA Region A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy. University of the West of England.
- Kim, J. S., Kaye, J., & Wright, L. K. (2001). Moderating and mediating effects in causal models. *Issues in Mental Health Nursing*, 22(1), 63-75.
- Klein A. (2002). Audit committee, board of director characteristics and earnings management, *Journal of Accounting and Economics*, 33(3), 375-400.
- Kothari, S. P., Leone, A. J. & Wasely, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39,(1) 163-97.
- Leuz, C., Nanda, D. & Wysocki, P.D. (2008). earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69, (3) 505-527.
- Marista O. and Mochamad M. (2019) free cash flow, size, and earning management. advances in social science, education and humanities research, volume 436 1st Borobudur international symposium on humanities, economics and social sciences (BIS-HESS 2019)
- Matthew S. F., & Ann M. A. (2017). Moderator Variables. Methods and Approaches in Psychology. *Industrial and Organizational Psychology*. DOI:10.1093/acrefore/9780190236557.013.86.
- McNichols, M. F. (2009). Discussion of the Quality of Accruals and Earnings: Management Decisions. *The Accounting Review* 83, 1571–1603.
- Mehdi N., Ines F., Tawhid C. & Faten L., (2016). Free Cash Flow and Earnings Management: The Moderating Role Of Governance and Ownership. *The Journal of Applied Business Research*. 2016 (32), 1
- Mehdi N., Ines F., Tawhid C. and Faten L., (2015) Free Cash Flow And Earnings Management: The Moderating Role Of Governance And Ownership.
- Mehidi N. and Alireza U. (2016) Free Cash Flow And Earnings Management: The Moderating Role Of Governance And Ownership *The Journal of Applied Business Research* – January/February 2016 Volume 32, Number 1
- Mohammad A., Erlend K. & John C. L., (2010). Earnings Management Priorities of Private Family Firms. Working Paper 3/2010.
- Muhammad A. P., Shahzad H., Abdul W., Qaisar A. M. and Muddasir M. (2021) institutional ownership heterogeneity and earnings management practices: empirical evidence from Pakistan. *Journal of Asian Finance, Economics and Business* Vol 8 No 6 (2021) 0267– 0275. doi:10.13106/jafeb.2021.vol8.no6.0267
- Nico A. (2021) effect of corporate governance on earnings management: a study on manufacturing companies listed in the Indonesia stock exchange. *Review of Integrative Business and Economics Research*, Vol. 10, Supplementary Issue 1 55
- Nitai C. D. , Suman P. C. and Safaeddazzaman K. (2021) ownership structure and real earnings management: an empirical study on emerging

- economy. *Corporate Ownership & Control* / Volume 18, Issue 2, Winter 2021.
- Noravesh I., Karami G.R. & VafiSani, J. (2009). To Study the Relationship Between Corporate Governance Mechanism and Agency Costs. *Accounting Research Journal*, 1, (3)4-27.
- Nuria R.A., Pilar F. and Joaquina L. (2019) Do auditors mitigate earnings management during an economic crisis. *Revista de Contabilidad Spanish Accounting Review* 22 (1) (2019) 6- 20
- Obaje, F. O., Abdullahi, S. R. Ude, A., O. (2021) Moderating Effect of Firm Size on the Relationship between Board Structure and Firm Financial Performance. Available online at <http://journals.rcmss.com/index.php/jggsda;www.academix.ng> ISSN: 2346- 724X (P) ISSN: 2354-158X (E), 6(3):97-117.
- Porthaila, B., BhettaChanye A. and Iyer B. (2021). The consequence of earnings management through discretionary accruals on the value relevance in Saudi Arabia. *Cogent Business & Management*, 8(1), 1886473.
- Punch (2015) The Punch www.punchnewsonline.com.
- Reza R. & Ghodratalah T. (2016). The effect of managerial ownership on the relationship between free cash flow and earnings management: *The Medwell Journal* 11(9)2305- 2312.
- Samaila R. (2014). The investment opportunity set and corporate financing, dividend and compensation policies. *Journal of Financial Economics*, 32 (3) 263–292.
- Samuel N. K., Gregory S. N. & George O. O. (2015). Firm characteristics and corporate cash holdings: a managerial perspective from Kenyan private manufacturing Firms. *International Journal of Advanced Research in management and Social Sciences*. 3(1) 5– 31.
- Sarbanes, P. 2002, July. Sarbanes-Oxley Act of 2002. *In The Public Company Accounting Reform and Investor Protection Act*. Washington DC: US Congress.
- Srikanth P., Kaushik B. & Vishwanathan I. (2021) Institutional ownership and earnings management: Evidence from India, *Cogent Economics & Finance*, 9:1, 1902032, DOI: 10.1080/23322039.2021.1902032.
- Susanto K. Y. and Bosta E. (2019) Free Cash Flow, Firm Characteristic, Corporate Governance on Earnings Management Trisakti School of Management, Jl. Kyai Tapa No. 20, Jakarta, Indonesia.
- Usman S. H. & Yero, J. I., (2014). Free Cash Flow, Growth Opportunity And Performance Of Nigerian Quoted Food, Tobacco & Beverages Firms. In Conference Paper, Presented at the 2nd International Conference organised by v Kaduna State University in March.
- Uwalomwa U., Uwuigbe, O. R. & Okorie B. (2015). Assessment of the Effects of Firms' Characteristics on Earnings Management of Listed Firms in Nigeria. *Asian Economic and Financial Review*, 5(2):218-228.
- Vince R., Mohamad A. A. H. and Oluwatoyin M. J. P. (2016) The Interaction Effect of Institutional Ownership and Firm Size on the Relationship between Managerial Ownership and Earnings management. International Conference on Accounting Studies (ICAS) 2016 15-18 August 2016, Langkawi, Kedah, Malaysia
- Watts, R.L. & Zimmerman, J.L. (1983). Towards a Positive Theory of the Determination of Accounting Standards. *The Accounting Review*, 53, (4)112-134.
- Wera L.(2011). The Relationship Between Firms' Free Cash Flow and Investment: an Empirical Study on Malaysian Public Listed Companies. *Thailand International Journal of Financial Research* 2,(2) 52-60.
- White, T. and Wu, G and Vance R.(2003). Financial constraints risk. *The Review of Financial Studies* 19,(3) 531-558.