Real Earnings Management and Dividend Payout among Non-financial Institutions in Nigeria

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Authors’ contributions

This paper work was carried out in collaboration between the authors. Author PEA designed the study and performed the statistical analysis. Author ETT managed the analyses of the study, wrote the protocol and wrote the first draft of the manuscript. Both authors managed the literature searches, read and approved the final manuscript.

ABSTRACT

Aims: This study seeks to evaluate the consequences of real earnings management and dividend payout among non-financial institutions in Nigeria.

Study Design: The study adopted Descriptive and ex-post facto research design.

Place and Duration of Study: Department of Banking and Finance, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria. The study was carried out between October 2019 and January 2020.

Methodology: To this end, we made use of Descriptive and ex-post research design, secondary data set, collected from thirty five quoted non-financial institutions for the period 2015 and 2018 financial period. The data were analyzed using Descriptive Statistics, Correlation Matrix.

Results: Our findings align with the agency theory which suggests that despite the fact that corporate contracting is primarily designed to align incentives between principals and agents, agency concerns are still created as a result of incompleteness and rigidities in binding of contracts,

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which lead to manipulation of the reporting process consequently altering shareholders returns in form of dividend payout.

**Conclusion:** Specifically, we find that real earnings management is been modulated through expenses. The variables of abnormal production and cash flow from operations show no significant effect on dividend payout with respect to the institutions and period under review.

**Keywords:** Real earnings management; dividend payout; non-financial institutions; Nigeria.

1. **INTRODUCTION**

Earnings management has become a significant issue in accounting literature and has attracted much attention by academic researchers. While there are many definitions of earnings management in the literature, the main idea is that earnings management involves the use of discretion in financial reporting with the aim of altering earnings to meet predetermined targets, which may be set by management or in terms of analyst forecasts, or to achieve a more sustainable earnings stream for the sake of achieving some private gain.

Since earnings management can be misleading to stakeholders, and also affect decisions of companies including dividend payout, it then becomes an important topic of consideration. Gaio [1] argues that the quality of earnings has become a very popular topic of debate among investors, analysts, regulators, and the financial press as it affects every stakeholder of the company. Dividends are considered a way to reward the shareholders of a company. When it is paid, everyone is happy, but when it is withheld, the shareholders tend to suffer and share prices of such companies might suffer. The problem now is that company management is in a fix to know if they are to reward the shareholders by way of dividend payout or retain such money to grow the business.

Dividends are considered more like a signal of firm future growth to the market but on the other hand, lack of it may generate tension among stakeholders. In particular, Baker and Powell [2] and Baker et al. [3] assert that strong intentions to maintain a sustainable dividend payout is the most important factor for a firm dividend policy and they also report that most firms exert efforts to provide consistent dividend payouts. This shows that a decrease in dividend can instigate negative consequences for the market value of the firm. Firms experience pressure to pay dividends to institutional and foreign investors who pursue investments in firms with high dividend payouts. Considering these anticipation, managers may choose to payout high dividends to live up to expectations on dividend policy decisions. However, if firms opt for high dividend payouts when faced with lower income or losses, stakeholders are not likely to approve this decision. Therefore, firms will prefer to execute dividend payouts from sufficient income, which may ultimately provide incentives to managers to depend on earnings management as a means to aggrandize their income.

1.1 **Statement of Problem**

In the literature, studies on earnings management and dividend payout are quite enormous with focus on many different aspects as it interests the researcher per time. However, studies into how earnings management especially real earnings management tends to drive dividend behavior in Nigeria or even Africa are not very much readily available. In fact, the work of Hessayri and Saihi [4] argue that there are few studies dealing with earnings management in emerging markets like Nigeria. This implies that there is the need to look into this aspect especially as it affects emerging economies like Nigeria.

Many other authors have also made attempt to study dividend payouts and real earnings management but seem to focus primarily on its interaction with corporate governance factors such as board size and board independence [5,6,7,8,9]. Studies such as that of Low [10] concluded that family board ownership could lead to dividend payout manipulation depending on the interest of such family. This was also supported by Jensen and Meckling [11] who found that there is an integrated relationship between ownership structure of a company and its long term divided performance. [12,13,14,15,16] are some other studies in the area of corporate behavior and dividend payout.

According to Sellami [17] and Lemma et al. [18] prior research has focused almost exclusively on the practice of accrual-based earnings management. This argument was also supported
by Cohen and Zarowin [19] who argue that recent research should show increased interest in the significance of understanding earnings management through real activities and not just accrual based. To further strengthen the argument of Cohen and Zarowin [19], Lemma et al. [18] argues that despite the substantial evidence to support the presence of real earnings management activities in firms, earnings management literature is still largely dominated by investigations of accruals-based earnings management with very little attention given to real earnings management activities. Our analysis expands the scope of previous studies on the impact of earnings management on dividend payout by incorporating real activities manipulation as an alternative earnings management mechanism. We argue that by focusing on one earnings management technique in isolation (e.g., accrual-based methods), To help fill this gap, this study looks at real earnings management variables that have been established in the literature and how they could possibly affect dividend payout of the sampled firms within the sampled period. Hence, this study is poised to investigate whether real earnings management activities are efficient or opportunist within firms in Nigeria and will provide additional contribution to extant literature. Also, this work will provide new argument in line with how real earnings management by managers affects dividend payout.

### 1.2 Objective of Study

The main objective of this study is to investigate the effect of real earnings management on dividend payout of quoted institutions in Nigeria. However, the specific objectives are to:

1. Investigate the effect of abnormal cash flow from operations on dividend payout of quoted non-financial institutions in Nigeria.
2. Find out the effect of abnormal production on dividend payout of quoted non-financial institutions in Nigeria.
3. Analyze the effect of abnormal expenses on dividend payout of quoted non-financial institutions in Nigeria.
4. Determine the effect of earnings accruals on dividend payout of quoted non-financial institutions in Nigeria.
5. Reveal the effect of firm size on dividend payout of quoted non-financial companies in Nigeria.
6. Examine the effect of firm age on dividend payout of quoted non-financial companies in Nigeria.

### 1.3 Research Questions

The questions to be answered in the course of this research include:

1. To what extent does abnormal cash flow from operations affect dividend payout of quoted non-financial institutions in Nigeria?
2. What magnitude of effect does abnormal production have on dividend payout of quoted non-financial institutions in Nigeria?
3. What is the effect of abnormal expenses on dividend payout of quoted non-financial institutions in Nigeria?
4. To what extent does earnings accrual affect dividend payout of quoted non-financial institutions in Nigeria?
5. What extent of effect does firm size have on dividend payout of quoted non-financial institutions in Nigeria?
6. To what extent does firm age affect dividend payout of quoted non-financial institutions in Nigeria?

### 2. CONCEPTUAL FRAMEWORK

#### 2.1 Dividend Payout

Dividend payout represents a portion of a company’s profit which is distributed to the shareholders. It also means a form of financing decision that involves the distribution of revenue profit to the shareholders in proportion to their holdings which could be in form of cash or non-cash bases. According to Weaver-Hart 1988, dividend is the returns that investors get for investing their money with a particular company. It comes as some sort of reward to investors. Which means that dividend payment is a way through which a firm rewards its’ shareholders and this is relevant as proposed by the dividend relevance theory.

In particular, Baker and Powell [2] and Baker et al. [3] assert that strong intentions to maintain a sustainable dividend payout is the most important factor for a firm’s dividend policy and report that most firms exert efforts to provide consistent dividend payouts to investors as a way to provide positive signals. This then means that a decrease in dividend can lead to negative consequences for the market value of the firm. As firms experience pressure to pay out dividends to institutional and foreign investors who pursue investments in firms with high dividend payouts, they could resort to
2.2 Real Earnings Management

Cohen and Zarowin’s [19] defined real earnings management as: “actions which managers take that deviate from normal business practices”. Mulford and Comiskey [21] states that earnings management is the “active manipulation of earnings toward a predetermined target, which may be set by management, a forecast made by analysts, or an amount that is consistent with a smoother, more sustainable earnings and dividend stream. Roychowdhury [22] added that earnings management is when the management of a company engages in any activity that will alter the true financial position of a company thereby reducing the reporting quality of such firm. This could be done using accrual accounting or manipulating real activities such as reductions and postponements of investments, manipulating cost of sales and the likes.

Real activities-based earnings management occurs when managers intentionally make operating decisions that have actual cash flow consequences with the goal of altering reported earnings. For example, managers may opportunistically reduce research and development expenditures in order to reduce expenses in the income statement in a given period thereby making more money available as profit. If this happens, automatically, there will be positive net income to report as dividend to the shareholders and vice versa, Dechow and Skinner [23]. According to Cohen and Zarowin [19] real activities-based earnings management are the actions managers take that deviate from normal business practices and that these actions are manipulations that affect cash flows which will obviously affect the dividend policy of the company.

Real earnings management is also used for directors’ remunerations, capital market, political and debt propositions, among others. Managers attempt to boost remuneration for the directors and for themselves as it is exclusively for personal incentives. They also want to obtain the benefits from the shares and share options, and thus the market value of the company is directly increased. Sometimes, managers manage earnings for tax purposes. Firms attempt to reduce their profit because it will directly reduce the tax they have to pay to the government. Debt or leverage is positively related to real earnings management practices. Debt is heterogeneous based on the amount of real earnings management which it triggers Sercu, Bauwhede and Willinens, [24]. When a firm incurs a high debt level, the firm may benefit from the tax shield by avoiding interest payment, which eventually increases firm value.

Burgstahler and Dichev [25] document an upward shift in the distribution of dividend from positive earnings and cash flows from operations. Burgstahler and Eames [26] proxy for business management by using scaled annual change in cash flows from operations and concludes that real earnings management plays a more important role than discretionary accruals helping management meet up with investors and market expectations. Roychowdhury [22] adds that firms conduct real earnings management to meet or just beat the analysis focus and dividend benchmark.

2.3 Abnormal Cash Flow from Operations

The accounting standards setters adopted the accrual method which could not show the change
in cash flow. According to accrual system, the net profit is equal cash flows plus accruals, hence we have:

\[ \text{Accruals} + \text{Cash Flow} = \text{Net income} \quad (1) \]

On a cash basis, due to the absence of accruals, net cash flow is exactly equal to net income. But in accordance with accounting standards this is an accrual which may cause possible manipulation of net profit by the manager through sales credit policy, related-party transaction, identify or not identify reserves and so on. Hence the above equation can be written as follows:

\[ \text{Accruals} = \text{Net Income} - \text{Cash Flow} \quad (2) \]

Equation (2) can be argued that if accruals can be controlled, then cash flows could equally be controlled. In other words, accruals management practices can lead to cash flow management. For example, capitalized certain operational costs, delay recognition of certain costs, increase profits and as a result operating cash flow is being manipulated. Accrual control arises from controlling operational activities of the business unit, such as buying and selling of goods to increase or decrease inventory, postponing the collection or receipt of timely demand, purchasing credit policies in order to increase the accounts payable at the end rather than first period, decrease the pre-payment, and so on. In other words, the timing of accruals which the director has created will directly affect operating cash flow [27]. The model of Lee’s [27] can be used to calculate abnormal operating cash flows.

2.4 Abnormal Production

Production is the sum of cost of goods sold (COGS) and change in inventory (ΔInventory). The variables of sales (St-1 / At-1), change in sales (ΔSt-1 / At-1), and lagged change in sales have been employed to estimate the normal levels of production costs in other studies. This proxy potentially captures the outcome of two real earnings management activities. First, it measures managers’ manipulation of production to changes in cost of goods sold. The more units a firm produce during an accounting period, the less fixed manufacturing overhead each unit shares, and vice versa. Second, it captures manipulation of products’ selling prices Following GAAP, this amount is already net of sales discounts, therefore, deep discounts will show up as positive abnormal production cost.

2.5 Abnormal Expenses

The deviation of spending discretionary expenses from normal to abnormal activities to influence reported earnings is one technique used by managers in real earnings management. Graham; Harvey and Rajgopal [28] showed that managers could reduce discretionary expenses when they are likely to miss their earning targets. Reducing such expenses will increase the reported earnings during the same period. Empirical evidence by Roychowdhury [22] indicated that managers employ research and development, selling, general, and administrative (SG&A), and advertising discretionary expenses in manipulating earnings to avoid recording losses. The researcher added that companies could reduce discretionary expenses to influence real earnings when these expenses do not have a direct effect on the immediate revenues.

2.6 Earnings Accruals

One way through which earnings can be managed is through accrual in which managers change estimates and accounting policies to increase or decrease earnings. According to Kothari, et al. [29], accruals-based earnings management occurs when managers intervene in the financial reporting process by exercising discretion and judgment to change reported earnings without any cash flow consequences. By engaging in accruals-based earnings management, managers can recognize revenues before they are earned or delay the recognition of expenses which have been incurred, thereby distorting the reporting value of the financial statement [21,6].

3. THEORETICAL FRAMEWORK

This study is based on three theories namely: Information Asymmetry Theory, Agency Theory and Political Cost Hypothesis. These theories are briefly espoused below;

3.1 Information Asymmetry Theory

The theory of asymmetric information was developed in the 1970s and 1980s by George Akerlof, Michael Spence and Joseph Stiglitz. The theory proposes that an imbalance of information between buyers and sellers can lead to inefficient outcomes in market situations. According to Scott [30], this occurs when one participant in a market has knowledge pertaining to an asset being traded that the other participant does not
know about. Since managers possess private information about the firms’ current and prospective earnings streams of which current and potential shareholders do not have, then information asymmetry exists between managers and shareholders. This misalignment could lead to earnings manipulation that will invariably affect the dividend opportunities of the shareholders [31].

According to Liu, (2010), Asymmetric information makes it possible for agents to manage earnings since it may be difficult for investors to ascertain the extent of earnings manipulation in firm characterized by an opaque information environment. Richardson [31] speculates that stakeholders lack sufficient resources, incentives, or access to relevant information that will enable them monitor the corporate actions including dividend decisions of managers. This then means that management has enough leverage to manipulate earnings to their advantage and decides whether to pay dividend or not to the investors.

Hence, information on earnings management (manipulation) through real activities on operating cash flow, over investment in production/inventory or abnormal expenses may be kept away from shareholders/investors with respect to increasing or decreasing dividend payout.

3.2 Agency Theory

This theory was propounded by Stephen Ross and Barry Mitnick in 1972. According to this theory, owners use contract to motivate agents to prevent conflict of interest (agency conflict). The theory of agency according to Eisenhardt [32], centers on deciding two problems that occur in agency relationship. According to him the two problems that occur are: problem of risk sharing and agency problem. The problem of risk sharing comes up if the agents and the principal’s attitudes to risk are different whereas agency problem occurs when principals and agents interests conflict Eisenhardt [32]. Agency cost according to Adam [33], are costs that are incurred due to contracting process. Principal can generally reduce the cost of agency by monitoring but same monitoring may as well involve costs Vaasan, (2010). Fama and Jensen [34] defined agency cost as “the cost of restructuring, monitoring and bonding a set of contracts among agents with conflicting interest”. According to Ross, (1973) the essence of Agency Theory is the divergence/ information asymmetry in the relationship between the principal (stakeholders) and agents (managers). We relate this study to the agency theory in the sense that despite the fact that contracting is primarily designed to align the incentives between principals and agents agency concerns are still created as a result of incompleteness and rigidities in binding of contracts, which lead to manipulation of the reporting process viv-a-vis returns in form of dividend payout to shareholders.

3.3 Political Cost Hypothesis

This theory was propounded by Watts and Zimmerman in 1978 and suggests that companies can manipulate their earnings so as to avoid certain government regulations as it relates to taxes since large and high profile firms may be motivated to manage their earnings downward thereby appearing less profitable and not declaring any form of dividend to the shareholders. The political cost hypothesis predicts that large firms are more likely to use accounting choices that reduce reported profits. Given the cost of information and monitoring, managers have incentive to exercise discretion over accounting profits and the parties in the political process settle for rational amount of ex post opportunism. For example if a firm records high profits this might be used as an excuse for trade unions or lobby groups to take action for an increase in a share of that profit (maybe through higher wages). Therefore firms may adopt income-decreasing accounting methods to prevent that from happening thereby leaving no profit to warrant dividend payment to the investors. Also, if a company wants to attract attention to its self, it can manipulate earnings to its favour. This is supported by Mulford and Comsikey [21] who believe that companies can defer revenues or accelerate expenses in order to decrease or increase their reported income to achieve a particular objective at a time. In the light of the above information provided by the political cost theory, we find that earnings management which is the core of our study may take the form of income decreasing accounting methods to discount profit so that no provision will be made for dividend payment to shareholders. Hence, we apply the political cost hypotheses because it is the mostly related.

4. REVIEW OF EMPIRICAL STUDIES

Chansarn and Chansarn [35] study the effect of earnings management on dividend policy of
small and medium scale enterprise in Thailand from 2005 to 2012. The study used dividend pay-out ratio and dividend yield as the dependent variable while discretionary accruals was used as measures for earnings management which is the independent variable, the control variables includes firm size and financial leverage. Multiple Regression was carried out on the study and the findings reveal that earnings management have a positive influence on dividend policy of firms in Thailand although not significant and so the study concludes that earning management exist in Thailand companies because of the presence of discretionary accruals.

Ali Shah, Yuan and Zafa [36], examine the impact of earnings management on dividend policy payout among companies in Pakistan and China for the period of 2001 to 2007. Dividend policy was measured in terms of dividend payout, while earnings management as the independent variable was measured in terms of discretionary accruals based on Modified Cross-Sectional Jones Model. Regression analysis was used to analyze the relationship between the dependent and the independent variables and the result shows that there is a relationship between earnings management and dividend payout policy.

Ezeagba, (2017) asserted that ownership structure is one of the factors that affects dividend policy and thus the major objective of his study was to find out the effect of ownership structure on dividend payout among Nigerian institutions from 2011 to 2015. Pearson Correlation was used to test the association that exist between the dependent variables (dividend payout ratio and dividend yield ratio) and the independent variable (Managerial Ownership and Institutional Ownership) and results show that there is no relationship between the variables and thus the study recommends that limited attention should be paid to ownership structure or dividend Payout because it is the earning that matters.

Khanna and Khanna [37] examines the impact of earnings management on dividend pay-out decision of firms listed in India between the period of 2008 to 2013. The study employs the Modified Cross-Sectional Jones Model to analyze the relationship between earnings management which was regressed on return on equity, self-financing ratios and size of the firm, and dividend pay-out decision. Result shows that return on equity and self-financing ratios significantly influence dividend pay-out decisions of firms in India. The authors conclude that discretionary accruals do not have any effect on the dividend pay-out decisions of firms in India.

Moradzadehfard and Babaie [38] conducted a study with the objective of examining the impact of dividend decision on a firm's real earnings management in Tehran Stock Exchange for the period of 2004 to 2011. The study used the modified Roy Chowdhury Model as well as regression to test the hypothesis. The result from the study shows that there is a significant relationship between the variables. The author concludes that dividend pay-out decision of companies has a decreasing and increasing effect on real earnings of quoted companies on Tehran Stock Exchange.

Haider, Ali and Sadiq [39] sought to empirically analyze the impact of earnings management on dividend decision of companies in Pakistan from 2005 to 2009. The study used discretionary accrual and non-discretionary accruals as measures for earnings management and dividend payout as measures for dividend policy. Regression analysis was carried out to test the relationship between the variables and the results show that there is no impact of earnings management on dividend decision of companies. The study concludes that although there is earnings management among companies in Pakistan, it does not have an impact on dividend announcement.

Saleem and Alifiah, (2017) studied the impact of earnings management on dividend decision among oil and gas companies in Pakistan from 2008 to 2015. The study used dividend paid as the dependable variable and discretionary accruals as calculated by Modified Jones Model. Regression analysis was then used to test the relationship between the variables and the results of the study indicate that earnings management does not have a significant relationship with dividend pay-out decisions. The study concludes that aside from earning management having an insignificant effect on dividend decision, there are some other factors that influence decision pay-out of firms in Pakistan.

Aurangzeb and Dilawer [40] studied the effect of earnings management on the dividend pay-out decision of textile firms in Pakistan from 1966 to 2008. The study took dividend pay-out decision
as a measure of its independent variable while earnings management was the dependent variable. Return on equity, self-financing decision and size of the firm were used as the control variables. Regression analysis was done to establish the relationship between the variables and results show that there is a negative relationship between the control variable and dividend pay-out decision. The study recommends that firms within the textile industry in Pakistan should reduce capital expenditure rather than focus on dividend policies, thereby curbing the increasing or decreasing effect on dividend pay-out decisions.

Ahmed, Advanni and Kanwal [41] empirically studied the impact of earnings management on dividend decision of selected firms in Pakistan from 2006 to 2016. The study was aimed at finding out the relationship between price earnings ratio and dividend pay-out ratios. Regression analysis was carried out and the results show that there is a negative relationship between the variables. The author concludes that Pakistani market is not predictable but dynamic.

Srikanth and Prasad [42] attempted to find the relationship between earnings management and dividend policy of quoted companies in India. The study used discretionary and non-discretionary accrual measure of earnings management. Regression analysis was carried out to determine the relationship. The results reveal that accruals are one of the factors affecting dividend pay-out decisions of firms in India and recommends that in a situation where reported earnings are viewed with some elements of doubts cash dividend will provide strong signal to investing parties about the credibility of such report.

Williams and Duro [43] conducted a study to determine the impact of dividend policy on the performance of listed companies in developing economies with the main objective of finding out how variables such as dividend payout ratio, return on equity, return on asset and profit after tax affect dividend policy from a period of 2005 to 2016. The study used ordinary least square regression analysis and the results reveal that there is a positive relationship between dividend policy and performance of listed firms in developing economies. The study concludes that profit after tax is sensitive to dividend payment.

Idris, Bala and Garba [44] studied the impact of earning management on dividend policy of listed non-financial companies in Nigeria at 2014. Dividend pay-out ratio was taken as the dependent variable and discretionary and non-discretionary accruals were taken as measures for the independent variable; earnings management. Regression analysis was carried out to determine the relationship and the results reveal that earning management has no impact on the dividend decision of non-financial companies quoted in Nigeria. Based on the results, the study concludes that earning management does not in any way impact dividend payment policies.

Ajide and Aderemi [45] in their study outline the effect of earnings management on dividend policy in Nigeria using listed non-financial institutions as at 2012. The variables employed in the study were dividend payout policy and earnings management. Firm size, financial leverage and return on equity (ROE) were the control variables. Ordinary Least Square regression was done to test the hypothesis and the results reveal that earnings management has a negative relationship with dividend decision of these companies. The study concludes that if management of these companies were to increase their discretionary accruals it would not lead to a corresponding increase in dividend pay-out for investors.

Arif, Abrah, Aziz, Kalyani and Ali Shar [46] investigated the impact of earnings management on dividend payout of firms in Pakistan from 2004 to 2009. The variables used for the study includes dividend pay-out ratio and the Modified Jones model was used as a measure of earnings management. Ordinary Least Square regression was applied and the result shows that there is no relationship between the variables of interest. Hence, the authors conclude that there are other factors that affect dividend pay-out decision as the involvement of management is not necessarily for earnings management.

Oliver and Ugah [47] studied the interaction between earnings management and dividend pay-out of companies in Nigeria from the period of 2004 to 2014. The variables for the study include dividend per share (DPS) and earnings per share (EPS). Regression analysis was adopted to test the relationship that exists between the dependent variable and the independent variables of interest. Their results show that there is a positive relationship between DPS, EPS and dividend payout and so they recommend that firms that want to raise their
dividend pay ratio value so as to give the shareholders and other projected investors the indication that they are very strong, should design and implement policies that will reduce cost and removal of wastes.

Moura De Sousa, Martins, De Aranga Pontes and Nakumura, (2018) studied dividend persistence and earning management in Latin America. The result of the study after applying regression analysis to the variables of return on asset and discretionary accruals shows that there is a positive relationship between dividend persistence and earning management. The study thus concludes that firms in Latin America with high earning can be said to most likely have artificial dividend persistence.

Simon-Oke and Polongunwa [48] evaluate the impact of dividend policy on firm performance of firms in Nigeria. The study employed ordinary least square regression to analyze the relationship between dividend per share, earnings per share and return on equity as variables in the study. The results reveal that dividend decision is highly a function of earnings per share and dividend per share and most significantly, return on equity.

Mukanzi [49] sought to find the implication of earnings management on dividend policy of cyclical firms listed in Nairobi Stock Exchange. The study employed regression analysis approach to test the data. The variables adopted for the study include dividend pay-out ratio and sales growth ratio. Leverage was taken as control variable and the result show that the control variables strongly and significantly influence the dividend policy of the firm. Hence, the study resolves that, earning cycle is an important factor that can influence dividend decisions of firms.

Gill, Biger and Tibrewala (2010) sought to examine the determinant of dividend payout of firms in the United States. The study employed regression analysis and the variables used were profit margin, sales growth ratio and debt to equity ratio as the major determinant of dividend pay-out ratio. The result of the study reveals that the variables employed significantly affect dividend payout decision of firms in the US. The study concludes that outcomes are dissimilar when dividend payout ratio is a measure of the ratio between the cash dividend and after-tax cash flow, not the after-tax incomes of the firms.

Hirindu and Kushani, (2017) examine the relationship between dividend payout and profitability of firms in Sri Lanka from 2012 to 2015. The study regressed dividend decision on dividend pay-out ratio and return on equity which were also employed as measures of profitability. Ordinary Least Square Regression Analysis was carried out to determine the relationship that exists between the variables of interest. The results show that the relationship between dividend pay-out and profitability is very significant and concludes that in a real-world setting, defining a suitable payout policy contains a tough choice because of the need to stabilize many possible incompatible forces.

Ongiri’s (2002) study sought to establish the effect of payment of dividends on Kenyan firms quoted on the Nigerian Stock Exchange. The research covered the firms which were in operation for the periods between 1988 and 2008. The research was geared towards the effect of government change on the above two variables as it touched on both the pre-multiparty and post-multiparty era. The study found mixed results as dividend payments affected market share prices in different directions from one company to the next.

Dewet and Mpinda (2013) concentrated on the effect of profit installment on south western with a specimen of 46 firms recorded on the Johannesburg Securities trade (JSE) for the period of 15 years from 1995 to 2010, which is a long time period to analyze the effect of dividends on the earning per share. The Johansen co-integration and Granger causality test was utilized to portray the short – run and long-run elements of the factors viz., market per share (MPS), earnings per share (EPS) and dividend per share (DPS). The outcomes demonstrated that over the long run, dividend per share (DPS) was positively identified with market per share (MPS), while earnings per share (EPS) don’t significant effect on per share market price (MPS). The study recommends that companies in South Africa should focus on the reinvestment of the dividends rather pay to the shareholders since this will increase the efficiency of the company.

Chemmanur et al. (2010) compare dividend policies of U.S. and Hong Kong firms and find that the latter employ more flexible dividend policies and engage less in dividend smoothing. Hail, Tahoun, and Wang (2014) report that in a sample of 38 countries from 1993 to 2008, the
U.S. firms exhibit the lowest incidence of dividend decreases at 9.4%, relative to the sample average of 16.5%. It is therefore plausible that the relationship between dividend paying status and earnings management may not persist or may be weaker for non-U.S. firms.

A study by Chan, Chan, Jegadeesh and Lakonishok (2001) based on US capital market data over a 25 year period indicated an inverse relationship between accruals and future stock return, i.e. an increase in earnings along with a high degree of accruals which are indicators of low earning quality will lead to weak stock return.

5. METHODOLOGY

5.1 Research Design

The study adopted Descriptive and ex-post research design was used in this study. The descriptive design is a research design whereby quantitative data is gathered and analyzed to illustrate the current trends in the given phenomenon Green & Tull (1966). The choice of descriptive research was on the basis that it allows a researcher to determine the correlations among several variables. Cooper & Schindler, (2003) However, the ex-post facto research design is hinged on two major reasons: Firstly, the study relied on historic accounting data obtained from financial statements of the sampled companies; hence the researcher does not intend to control or manipulate the data of the study variables which is a basic feature of ex-post facto research design. Secondly, the ex-post facto research design is adopted for this study since we intend to determine cause-effect relationship between the independent and dependent variables with a view to establishing a causal link between.

5.2 Sources of Data Collection

This study employed secondary data collection technique. Secondary data collection is the gathering of information already researched and presented by other scholars Dawson, (2009) or data obtained from other sources. These secondary sources include: Audited Annual Reports of the sampled quoted companies on the Nigerian Stock Exchange Fact Book (NSE) 2018. Secondary data provides useful information necessary for carrying out an evaluation. Furthermore, the use of secondary data provides a lot of background work conducted by different researchers hence a lot of information becomes available to explore. Johnson, (2014).

5.3 Sample and Sampling Techniques

A sample of thirty five non-financial quoted institutions was employed for the study. The Simple Random Sampling Technique adopted from Freud and Walpol (2000) was employed for selecting these institutions. The availability of consistent and complete data that corresponds to the variables of interest for the period under consideration is a basis for selecting the firms under consideration. The time scope of the study is a 4 year period, 2015 to 2018.

5.4 Model Specification

In specifying the model for this study, we follow a model of Mastuki (2015) that employed real earnings management proxies of (i) abnormal cash flow from operations; (ii) abnormal discretionary expenditures; (iii) abnormal production costs; (iv) earnings accruals and control variables of firm size and firm age. Hence we specify the model below as:

\[ DP = \beta_0 + \beta_1 \text{ABCFO} + \beta_2 \text{ABPRO} + \beta_3 \text{ABEXP} + \beta_4 \text{ENACR} + \beta_5 \text{AGE} + \beta_6 \text{SIZE} + \epsilon_i \]

Where:

The dependent variable is:

\[ DP=\text{Dividend Pay-out Ratio.} \]

\[ \text{ABCFO}=\text{Abnormal cash flow from operations}. \]

\[ \text{ABPRO}=\text{Abnormal production} \]

\[ \text{ABEXP}=\text{Abnormal expenses} \]

\[ \text{ENACR}=\text{Earnings Accruals} \]

\[ \text{AGE}=\text{firm age} \]

\[ \text{SIZE}=\text{Firm Size} \]

\[ \epsilon_i = \text{error terms over the cross section and time} \]

The presumptive signs of the parameters in the specifications are: \( \beta_1, \beta_2, \beta_6, > 0 \).

5.5 Method of Data Analysis

Panel data was preferred as it considers the cross-sectional and time-series characteristics of the sample data. In essence, the panel data analysis accommodates ‘time as well as the heterogeneity’ effects of the quoted companies. The panel data adopted in this study was unbalanced panel data based on the possibility
of some missing data. The use of panel data regression methodology in this study was based on three fundamental justifications: (1) the data collected were subject to time and cross sectional attributes and this enabled us to study innovation and performance of firms over time (time series) as well as across the sampled quoted companies (cross-section), (2) the panel data regression provides better results since it increased sample size and reduced the problem of degree of freedom, and (3) the use of panel regression would help to avoid the problem of multicollinearity, aggregation bias and endogeneity problems Greene, (2002).

The estimation results were evaluated based on individual statistical significance test (t-test) and overall statistical significance test (F-test). The goodness of fit of the model was tested using the coefficient of determination (R-squared). In this study, we conducted descriptive statistics and correlation analysis to properly describe the nature of our data set. In conducting data analysis, we used both Microsoft Excel and Stata software packages.

6. RESULTS

6.1 Data Presentation

This section presents the descriptive statistics of the study.

The descriptive statistics is meant to reveal the basic features of the data used in the analysis. These include: the mean (average) for each of the variables, their maximum values, minimum values, and standard deviation statistics as shown in the Table 1.

We find out that the mean value of dividend payout (DP) within the period of review is 0.39. Any company that pays above this is giving more reward to shareholders than the market average for the period under review. Abnormal production (ABPRO) shows an average value of 0.14 within the period. This means that the average level of abnormal production in the sample is low. Abnormal expenses (ABEXP) happened to have had the highest average value with a mean of 0.46. Abnormal CFO also showed a low average of about 1% in the sample period. The maximum dividend payout within the period was 2.70 while the some of the firms did not pay dividend during the period of analysis.

6.2 Empirical Results

The following presents results of the Pearson Correlation Matrix.

Table 2 presents the correlation matrix of the variables under study. The Pearson correlations above show the straight-line relationship among the variables of interest. It shows that Dividend Payout (DP) is positively correlated with all the real earnings management variables as established in the literatures with the exception of abnormal cash flow from operations (ABSCFO). This means that any form of increase in real earnings management activities has a tendency to drive up dividend payout most likely. We also observe that no two variables of interest are highly correlated showing the absence of multicollinearity which could have hampered the plausibility of our results and conclusions.

6.3 Panel Data Robust Ordinary Least Square Regression

The results of Panel Data Robust Ordinary Least Square Regression are presented in Table 3.

In testing the cause-effect relationship between the dependent variable and the independent variables with a link to our formulated hypotheses, we employed robust ordinary least square regression analysis technique.

Table 1. Descriptive Statistics

*(10 variable 140 observations pasted into data editor)*

<table>
<thead>
<tr>
<th>stats</th>
<th>dp</th>
<th>abpro</th>
<th>abscfo</th>
<th>abexp</th>
<th>enacr</th>
<th>fsizex</th>
<th>age</th>
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<tr>
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<td>.0121429</td>
<td>.4631429</td>
<td>1.452029</td>
<td>7.049286</td>
<td>26.18571</td>
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<tr>
<td>P50</td>
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<td>.14</td>
<td>.005</td>
<td>.479</td>
<td>-.05</td>
<td>7.015</td>
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<tr>
<td>max</td>
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<td>.17</td>
<td>.58</td>
<td>1</td>
<td>119.59</td>
<td>8.59</td>
<td>41</td>
</tr>
<tr>
<td>min</td>
<td>0</td>
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<td>-.96</td>
<td>.04</td>
<td>-49.76</td>
<td>5.65</td>
<td>1</td>
</tr>
<tr>
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<td>.0142428</td>
<td>.1415196</td>
<td>.2234139</td>
<td>19.46501</td>
<td>.6709659</td>
<td>11.89558</td>
</tr>
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</table>

*Source: Author computations 2019*
Table 2. Pearson correlation matrix

correlate dp abpro abscfo abexp enacr fsize age,
(obs=110)

<table>
<thead>
<tr>
<th></th>
<th>dp</th>
<th>abpro</th>
<th>abscfo</th>
<th>abexp</th>
<th>enacr</th>
<th>fsize</th>
<th>age</th>
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<tr>
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<tr>
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<td>0.0607</td>
<td>1.0000</td>
</tr>
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</table>

Source: Author computations 2019

Table 3. Panel Data Robust ordinary least square regression analysis result

<table>
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<tr>
<th></th>
<th>Coef.</th>
<th>Robust Std. Err.</th>
<th>t</th>
<th>p&gt; (t)</th>
<th>95% Conf. Interval</th>
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<td>-.83</td>
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<td>-.2386738</td>
</tr>
</tbody>
</table>

R-squared 0.13
F-statistic 4.44
Prob(F-statistic) 0.0004
Source: Author computations 2019

6.4 Test of Hypotheses

The result presented in the Table 3 show R-squared value of (0.13). This indicates that all the independent variables jointly explain about 13%, of the systematic variations in the dependent variable of our study. This poor R square does not impact our results negatively in any way but suggests that more variables should be added to the work as there was a large extent of variable exclusion in the model. The F-statistics and probability F, (4.44) and (0.0004) respectively shows that the model is well specified and generally significant which means that we are 95% confident of the relationship between the variables is linear.

Hypothesis 1: Abnormal Cash Flow from Operations does not significantly affect dividend payout in Nigeria.

Abnormal Cash Flow from Operations (ABCFO) has a negative coefficient value of (-0.16) and p (t) = (0.49) which shows that it is negative but insignificantly related with dividend payout. This means that Real Earnings Management using abnormal cash flow during the period under analysis reduces dividend payout but not at a significant level. Therefore, we accept the null hypotheses and conclude that manipulating cash flow from operations does not significantly impact dividend payout among quoted non-financial institutions in Nigeria.

Hypothesis 2: Abnormal Production does not significantly affect dividend payout in Nigeria.

From the regression analysis we observe a coefficient value of 4.10 and p (t) = 0.30 which shows that the variable of abnormal production has a positive effect on dividend payout but is not statistically significant within the period of study. This means that increase in inventory level will not significantly affect dividend payout in a period. This finding does not meet the expectation hence; we accept the null hypothesis and conclude that abnormal production activities do not significantly affect dividend payout among quoted firms in Nigeria.
Hypothesis 3: Abnormal Expenses does not significantly affect dividend payout in Nigeria.

The variable of Abnormal Expenses (ABEXP) has a positive coefficient value of (0.49) and p (t) = (0.008) statistically significant at 5% showing a positive and significant effect on dividend payout during the period under study. This means that when expenses are manipulated upwards, it pushes dividend payout upward. This finding agrees with the expectation and suggests that real earnings management variable of abnormal expenses has a significant positive effect on dividend payout among quoted firms in Nigeria.

Hypothesis 4: Earnings Accruals does not significantly affect dividend payout in Nigeria.

Earnings accruals has a coefficient value of (-0.000) and p (t) = (0.823) which shows that it is negatively but insignificantly affects dividend payout. This means that Real Earnings Management using earnings accruals during the period under investigation reduces dividend payout but not at any significant level. Therefore, we accept the null hypotheses and conclude that earnings accrual does not significantly affect dividend payout among quoted non-financial companies in Nigeria.

Firm Size (FSIZE) has a value of coefficient (0.004) and p (t) = (0.947) which shows a positive but insignificant effect on the dependent variable of dividend payout. This means that the control variable of firm size isn’t significant in driving dividend payout in this study. Therefore we conclude that firm size has no significant effect on dividend payout among non-financial quoted companies in Nigeria.

Firm Age (AGE) has coefficient value of (0.01) and p value= (0.000) which is statistically significant at 1% and shows that firm age has a positive and significant effect on the dependent variable of dividend payout among quoted firms in Nigeria.

7. DISCUSSION

Extant literature in accounting shows two major perspectives of earnings management vis-a-vis the opportunistic perspective and the signaling perspective. In the opportunistic perspective, the manager has an interest in using accounting discretion to maximize his wealth, which is detrimental of the stakeholders Schipper, (1989).

Furthermore, Atieh and Hussain (2012) and Halauoa et al. (2017) have turned to the earnings management thresholds strategy to achieve certain thresholds of earnings which connote that firms can manage earnings to meet or exceed certain thresholds: zero earnings, last period’s earnings, analysts’ earnings forecasts, dividend levels, etc.

The result obtained from our study can be linked to the signaling perspective which assumes that managers manage earnings to signal the company’s future prospects or provide investors in the market with private information. The finding from this study tallies with that of (Chan et al., 2016) that since suspensions or reductions of dividend payments would cause dissatisfaction among investors, such circumstances may lead to dividends smoothing. In this instance, earnings persistence is considered in the literature as a desirable and relevant factor for the prediction of future results, as well as for effective evaluation of assets. Our result also lends credence to the results obtained from the studies of Tucker and Zarowin, (2006) Gul et al. (2003) Paulo, (2007), who claim that earnings volatility may be tied to earnings management as firms smooth their earnings so that performance is more predictable. In turn, the earnings can also be managed so that the dividends are also persistent.

8. CONCLUSION

In this study, real earnings management is broken down into the various components of abnormal cash flow from operations, abnormal production/inventory and abnormal expenses as identified in the literature. In summary, the variable of abnormal expenses of earnings management showed that dividend payout is significantly affected by expenses manipulation in the sampled institutions. This finding supports the view that institutions can sometimes engage in real earnings management just to return more dividends to investors as a way of giving out positive signals to the market per time. This seems to be the only real earnings management variable in this study that positively and significantly drives dividend payout upwards. The study recommends that investors and value users should pay serious attention to the real expenses of quoted non-financial institutions as that can be a most likely place to manipulate earnings from. This would then mean that any form of dividend payout that is hinged on real earnings management wouldn’t likely be
sustained by the paying company unless if the manipulated activities continues.

CONSENT

As per international standard or university standard written participant consent has been collected and preserved by the author(s).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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