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Management Accounting Practices and Return on Equity of Listed Food and Beverages Companies in Nigeria

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ABSTRACT

This study was carried out to evaluate the connection between management accounting practices and return on equity of listed food and beverages companies in Nigeria. Cross sectional data were sourced from Financial statements of the quoted firms from 2014-2023. Return on equity was modeled as the function of Inventory management measured as value of raw material and work in progress to total operating cost, budgetary control measured as percentage of fixed assets to total operating cost and cash management measured as percentage of net cash flow to total operating cost. The study adopted panel data Ordinary Least Square. Panel unit root, cointegration and granger causality test were used as data analysis methods. Based on the fixed effect regression model, the adjusted coefficient of determination (Adjusted R^2) indicates that 60 percent variation on the return on equity of the selected manufacturing firms can be traced to variation on the management accounting practices of the firms; this implies that 40 percent variation can be traced to factors not captured in the model. The results of the estimated model proved that the model is statistically significant based on the F-statistics and probability. The Durbin Watson statistics proved the presence of serial autocorrelation among the variables. The regression intercept is positive and significant which implies that holding other variables constant, return on equity of the manufacturing firm will increase by 13.5 units. From the findings, the study concludes that inventory management has positive and no significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria. That budgetary control has negative and significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria. That cash management has negative and significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria. The study recommends that management of the quoted consumer goods manufacturing firms should be keen on making cost management policies to be applied since they greatly impact on financial performance of the company. Policies regarding to financial performance of companies should incorporate various cost management strategies since they greatly impact financial performance. Financial policies regarding cost management strategies should be formulated and be used keenly and with a lot of controls to avoid critical financial loses. Management of the consumer goods manufacturing firms should use the costing techniques that are most suitable for their environment such as the level of technological advancement, size of the company, stage of the product and culture and there should be naturalistic research for the development of cost and management techniques and Management of the consumer goods manufacturing firms should only adopt those techniques that have practical basis and those techniques that their competitors have successfully adopted.

Keywords: Management Accounting, Practices, Return on Equity, Food and Beverages Companies, Nigeria

INTRODUCTION

In the past three decades, many Nigeria firms have witnessed considerable lapses and increasing changes in management disciplines. In the production process, costing is an important element in the overall operation of an organization although the provision of relevant information about cost is one of the problems organizations are facing because there are no satisfactory requirements to maintain detailed cost records; some small firms keep only traditional financial accounts and prepare cost information in an ad-hoc-fashion (Kumar & Shafabi, 2011).

There is a vast range of accounting practices in operation ranging from simple analysis to computer based accounting systems incorporating standards, variance analysis and the automatic production of control and operating statements. These different costing practices are meant to suit different organization. The adaptation of the wrong method, for a company constitutes a problem instead of a solution (Kumar & Shafabi, 2011). Poor or inadequate knowledge of a particular method of costing constitute problems for many firms. Most companies are still using the simple analysis system to set cost while some companies do not even have a costing system. This no doubt has led to poor planning, control and decision making. Various researches carried out bring about mixed findings on the relationship between management accounting practices and the financial performance. Some argued that management accounting is an efficient way of improving financial performance of a firm while others argue that management accounting is old fashioned and based on past information hence it cannot on its own greatly impact on financial performance of a company (IIias, Abd & Yasoa, 2010); (Lucas, Prowle & Lowth, 2013).

Present management accounting and management control systems rest on concepts developed almost a century ago when the nature of competition and the demands for internal information were very different from what they are today. After all developments and changes, in order to survive and make profit in global competitive environment, manufacturing companies have started to question their traditional and cost management systems with the aim of adaptation to global competition and supplying quick-changing demands and expectations of consumers. Traditional management accounting practices strategies have also lost their influence in this new competitive environment. Limited resource and apparent continuous competition influence firms to better management accounting practices in the areas of cost of production by implementing standard costing, budget system, monitoring cost information, and focusing on value added activities by eliminating non-value added activities through supplier coordination, and emphasizing on cost structure by analyzing cost and finding the way to reduce costs in the stage of pre-production (Maziriri & Mapuranga, 2017); (Nwanyanwu & Ogbonnaya, 2018); (Okunbor, 2013). Firms with management accounting strategy implementation are able to know when the amount of cost will incur in the future if they have current and future cost information. There are many studies on the effect of management accounting practices, significant proportion of the studies are foreign studies as stated by: (Sunarni, 2013); (Akenbor & Okoye, 2012); (Dauda, Akingbade & Akinlabi, 2010). Similar studies in Nigeria failed to integrate modern management accounting methods like inventory management budgetary control among others, while the study of (Oluwagbemiga, Olugbenga & Zaccheaus, 2014); (Ogbadu, 2009); (Adesina, Ikhu – Omoregbe & Aboaba, 2015); (Okwo, & Ugwunta, 2012) focused on small and medium scale enterprises. From the above studies, non, mostly among the local researchers has been able to established this relationship that exist between the modern management accounting practices and the financial performance of quoted consumer goods manufacturing firms especially in Nigeria. This study however examined this gap and focused its research on the relationship between management accounting practices and return on equity of quoted manufacturing firms in Nigeria.

LITERATURE REVIEW

Management Accounting

Management accounting is the process of identifying, measuring, accumulating, analyzing, preparing, interpreting, and communicating financial information used by management to plan, evaluate, and control within an organization and to assure appropriate use of and accountability for its resources (Smith, 2009).

According to Ndwiga (2011) management accounting practices are connected with providing management solutions for the internal management purposes.

Epstein and Lee, (2008) as well as Nuhu, Baird & Appuhami, (2016) are of the view that management accounting practices are organizational information systems that offer an organization with pertinent information to add value to its customers and organizations. Management accounting practices enables effective decisions and assists organizations in encouraging intended behaviours (Abdel-Kader & Luther, 2006). Management accounting practices can comprise Cost, budgeting, performance evaluation, information for decision-making and strategic analyses, among many others (Gichaaga, 2013).

The amount of direct costs is dependent on the scope of works, unit prices of materials, wage tariffs and costs of machinery usage, and can be easily planned in a detailed way. However, a proper allocation of overhead costs to individual contracts is a challenging issue. Taking into consideration that overhead cost can be considered as a factor of the company's competitiveness. It is obvious that overhead costs should be managed adequately in order for the company to remain eligible to participate in tenders with acceptable prices. Overhead cost is defined by (Gichaaga, 2013) as costs that are not a component of the actual construction work but support the main work. Accordingly, administration staff wages, the depreciation of fixed assets or acquisition and operation of information technology and mobile devices are among the typical overhead cost items.

Inventory Management

The costs of inventories comprise all cost of purchase, cost of conversion and cost incurred in bringing the inventories to their present location and condition. Inventory is an important and valuable asset. It constitutes substantial portion of the total current assets of a business. Inventory covers a wide variety of items which are meant to be procured, used up and sold in an ordinary course of business. It covers the whole range of items starting from input of material and ending with output of finished products. According to Josh (2000), the item forming inventory can be classified into three categories: (1) raw materials, (2) work-in-process (WIP) and (3) finished goods. Raw material inventory represents the item of basic inputs which are yet to be processed into final product. Work-in- process covers all items which are at various stages of production processes. These items have ceased to be raw material but have not developed into final products and are at various stages of semi-finished levels. Finished goods inventory consists of the final products which are awaiting sale. According to Hugo (2002), the aim of inventory management is to hold inventories at the lowest possible costs.

Josh (2000) enumerates the objectives of inventory management as fellows; - To reduce cost of holding stock so that investment in stock outs (running out of stock) production cycle operates smoothly. - To persuade the business to reduce the levels of inventory whereas one prompts it to increase the same. When making decisions on inventory, management has to find a compromise between the different cost components, such as the cost of supplying inventory, inventory-holding costs and cost resulting from insufficient inventories. Starr & Miller (1962) identify three motives for holding inventories which are similar to Keynes three motives for holding cash. The transaction motives which emphasizes the need to maintain inventories to facilitate smooth production and sales operation, the precautionary motive which necessitate holding of inventories to guard against the risk of unpredictable changes in demand and supply forces and other factors; and the speculative motive which influence the decision to increase or reduce inventory levels to take advantage of price fluctuations.

Budgetary Control

Budgetary control is the process of developing a spending plan and periodically comparing actual expenditures against that plan to determine if it or the spending patterns need adjustment to stay on track. This process is necessary to control spending and meet various financial goals. Organizations rely heavily on budgetary control to manage their spending activities, and this technique is also used by the public and private sectors (Dunk, 2009).

Budgetary control is system which uses budgets as a means of planning and controlling all aspects of producing and selling commodities or services. This is true as we tend to prepare revenue and expenditure variance analysis to be able to deduce area of divergences for which management needs to watch to avoid

embarrassment as any adverse variance will translate in to inability to meet the corporate objective which will eventually lead to disagreement with stakeholders (Batty, 1982).Although many people complain about budget and its process, budgets are indispensible in a large modern organization as the benefit that occurs from budgets and its control is much greater than the cost involved.

The fact that resources are scare, coupled with high competition that permeate most business, budgets when rightly applied, would be an effective tool for planning and control, especially large organization as Nepal Oil Corporation (Pandey, 1985).Performance refers to the extent of which an organization's goals and objectives are achieved effectively and efficiently while financial performance is general measure of a firm's overall financial health status over a given period of time. Financial performance can be measured by using variable such as firm's cash flow, working capital, cost base, borrowing as well as firm's growth (San and Heng, 2011).

Cash Management

From economic theory, several writers have theorized in support of Keynes that the motives for holding cash are merely, transactionary, precautionary and speculative. According to Keynes (1973), companies hold cash in order to bridge the interval between the time of incurring business cost and that of the receipt of the sale-proceeds. In other words, companies hold a certain amount of cash in order to meet the regular expenses of their activity. Therefore, the higher the firm's ability to schedule its cash flows (depending on their predictability) the weaker the transactions-motive for holding cash will be. The transaction motive illustrates the cash holding of firms and therefore more applicable to SMEs. The precautionary motive pays regard to a company's need to provide for unsuspected expenses and unforeseen opportunities of advantageous purchases. Thus, if a firm operates in a highly volatile sector, its precautionary cash holding will be higher than that of firms operating in a less risky environment.

The third motive for holding cash refers to the holding of cash for the purpose of speculation. The speculative-motive is based on the assumption that rising interest rates induce decrease in prices of securities and vice versa. Therefore, a firm will invest its idle cash in securities when interest rates are expected to fall. This generates benefits for the firm because the prices of the acquired securities will rise as a consequence of the anticipated fall in interest rate. Horne (2000) claims that companies do not hold cash for this kind of speculative purpose and can be assumed that this estimation is valid especially for SMEs which usually do not have the resources to make such complex financial decisions. The success of a firm's failure in cash management depends to a large extent in the strategy adopted. In this direction, Gitman et al (1970) suggest that each company's uniqueness in both receiving and disbursing funds from its operation should be recognized.

Further to this, they suggest the adoption of cash management strategies based upon a company's own financial conditions and objectives. Yankey (1974) also observe that money is a scarce commodity and has several alternative uses. It is necessary that managers utilize every cedi so efficiently that the return on each cedi is approximately equal to the return of a cedi in an alternative investment of comparable risk. Srinivasan (1999) stresses that cash management strategy aims to cover the following aspects: cash budgeting/forecasting, managing cash flows through organized collection management and proper disbursement management, optimum cash level and investing surplus cash. Suitable cash policies should be laid out by the Director (finance) or in each of the above cash management areas. Such cash policies help the company to mobilize funds or cash at the right time and place, plan disbursement on the basis of expected collections, ensure optimal utilization of cash and avoid overdraft, finally invest surplus cash in short-term securities. Meyer (1992) state that effective cash management is particularly important for small firms for several reasons:

Return on Equity (ROE)

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity since shareholders' equity is equal to a company's assets minus its debt. ROE is considered the return on net assets. ROE is considered a gauge of a corporation's profitability and how efficient it is in generating profits. The higher the ROE, the more efficient a company's management is at generating income and growth from its equity financing. Abdullah (2020) explains that sustainable

growth rates and dividend growth rates can be estimated using ROE, assuming that the ratio is roughly in line or just above its peer group average. Although there may be some challenges. ROE can be a good starting place for developing future estimates of a stock's growth rate and the growth rate of its dividends. These two calculations are functions of each other and can be used to make an easier comparison between similar companies

Theoretical Review

Contingency Theory

Contingency theory is an approach to the study of organizational behavior in which explanations are given as to how contingent factors such as technology, culture and the external environment influence the design and function of organizations (Islam & Hui Hu, 2012) the essence of contingency theory is that best practices depend on the contingencies of the situation. Contingency theory is often called the "it all depends" theory, because when you ask a contingency theorist for an answer, the typical response is that it all depends. The term contingency as used in contingency theory is similar to its use in direct practice. A contingency is a relationship between two phenomena. If one phenomenon exists, then a conclusion can be drawn about another phenomenon.

Contingency theory has been applied in accounting in several ways and by several authors. Hofstede (1983) found that, economic, technological and sociological considerations had a significant impact on the functioning of budgeting systems. Shank (1989) also applied contingency principles in investigating the use of managerial accounting systems and information in a strategic way and Banker, Datar and Kemerer (1991) looked at the impact of structural factors and found that firms which implemented just-in-time (JIT) or other team-work programs were more likely to provide information regarding performance to shop-floor workers.

Kaizen Costing System

Kaizen a term with Japanese origin (Sani and Allahverdizadeh, 2012) was launched by Masaaki Imai (Rof, 2012) the concept is a coinage of two Japanese words: KAI (Change) and ZEN (for better) (Rof, 2012). Thereafter, Yashuhiro Monden from Japan developed Kaizen Costing as the costing counterpart to the Kaizen approach (Industrial and Financial Systems, 2001). This concept refers to the process of continuous improvement (Rof, 2012; Sani and Allahverdizadeh, 2012).The principle behind Kaizen Costing application is on achieving small, gradual but continuous improvements in the production process at minimal cost (Rof, 2012). Ellram (2000, cited in Modarress, Ansari, & Lockwod, 2004) observed that Kaizen Costing ensures that products meets or exceeds customer demands for 'quality, functionality, and prices' in order to sustain the product's competitiveness. This according to Rof (2012) can be achieved through a sequential elimination of all the processes that would increase the product's cost of production without a corresponding increase in value.

Inventory Control Theory

Zappone (2014) stated that managing all kinds of assets in an organization can be viewed as an inventory problem. For the large companies they use a variety of inventory control theories and mathematical formulas to help them optimize the production and storage of many thousands of units of products and to help them minimize costs. At the same time the small-business owners can use ideas from several inventory control methods to manage their production and storage based on their cost-containment and customer service needs. Any inventory manager's goal within an organization is to minimize cost and maximize profit while satisfying customer's demands. Too much inventory consumes physical space, creates a financial burden, and increases the possibility of damage, spoilage and loss (Zappone, 2014) further explains that excessive inventory frequently compensates for sloppy and inefficient management, poor forecasting, haphazard scheduling, and inadequate attention to process and procedures. Too little inventory often disrupts manufacturing operations, and increases the likelihood of poor customer service. In many cases good customers may become dissatisfied and take their business elsewhere if the desired product is not immediately available. Companies with very high inventory ratios have more possibilities to be bad financial performers. Shah and Shin (2007), reported a strong negative relationship between the

cash conversion cycle and corporate profitability for a large sample of public American firms. Firms with abnormally high inventories have abnormally poor stock returns, firms with abnormally low inventories have ordinary stock returns while firms with slightly lower than average inventories perform best over time. Shah and Shin (2007) stated that reducing inventories has a significant and direct relationship with a firm's financial and operational performance.

Empirical Review

Oluwole (2025) examined the effect of Cost Account Management Practices and Earnings per Share of Quoted Manufacturing Firms in Nigeria. Panel data were sourced from annual reports and financial statements of quoted firms from 2014-2023. Panel data ordinary least square methods, cointegration, unit root and causality were used to analyse the dynamic effect of cost account management practices and earnings per share. Findings from the study proved that 49 percent variation on the earnings per share of the selected manufacturing firms can be traced to variation on the management accounting practices while beta coefficient of the variables proved that cash management have negative and significant effect, budgetary control have negative and no significant effect while inventory management have negative and significant effect on earnings per share of the manufacturing firms. From the findings, the study concludes that inventory management has negative and no significant relationship with earnings per share of the food and beverage manufacturing firms in Nigeria. That budgetary control has negative and significant relationship with earnings per share of the food and beverage manufacturing firms in Nigeria. That cash management has negative and significant relationship with earnings per share of the food and beverage manufacturing firms in Nigeria. it recommend that The consumer goods manufacturing firm's management, policy makers and transaction advisors should be keen on making cost management policies to be applied since they greatly impact on financial performance of the company and accounting policies regarding to financial performance of companies should incorporate various cost management accounting practices since they greatly impact financial performance and financial policies regarding cost management strategies should be formulated and be used keenly and with a lot of controls to avoid critical financial loses

Jonah, Okiakpe and Atteng (2024) was carryout to evaluate the connection between cost accounting practices and financial performance of listed food and beverages companies in Nigeria.This study utilized a descriptive survey research design as its methodology, with the Resource-Based View (RBV) theory serving as its foundation. Triangulation was used to gather data for the research from many sources, including primary and secondary sources. Only 127 of 135 surveys addressed to workers at selected Nigerian food and drink enterprises had replies; only 120 valid returns were retained for main data analysis, alongside with the corporations' annual financial statistics for the years 2016–2023. We used the regression approach, computed the Pearson product-moment correlation coefficient, and conducted descriptive statistics using SPSS version 22.0. There was a weakly positive correlation between cost accounting practices and financial performance for listed food and beverage companies in Nigeria, according to the empirical study. Furthermore, net profit margin was found to be positively correlated with activity based costing and target costing, but negatively correlated with standard costing. The study concludes that there is a significant relationship between cost accounting practices and financial performance of listed food and beverages companies in Nigeria. The study recommends that there should be proper Routine training of staffs on modern cost accounting practices to enhance effective cost control and cost reduction resulting to improve financial performance. Proper cost accounting practices policy should be embarked upon by policy makers as it will greatly impact on financial performance of the company amongst others.

Erasmus (2021) analyzed the cost management practices and financial results of publicly traded deposit money banks in Nigeria. The study's research approach relied on a triangulation technique grounded on the ideas of contingency theory. Ten (10) deposit money banks in Nigeria were selected as the population from among the fifteen (15) that were involved in the study. The primary sources for this study were the yearly reports of a subset of the institutions that were examined from 2010 to 2018. To analyze the

provided data, the least square regression method was used. The findings demonstrated a robust negative link between target costing and profit before taxes, in contrast to a robust positive correlation between conventional and activity-based costing. Following the implementation of cost management measures, the financial performance of listed deposit banks in Nigeria improved. In order to boost financial performance by reducing and controlling costs, staff members should get frequent training on modern cost management tactics.

Matete et al. (2017) examined the variables impacting material cost accounting in relation to the financial performance of stock-listed Kenyan manufacturing businesses using a case study research technique based on cost benefit theory. We analyzed the primary data collected from 35 workers of the Momias Sugar Company in Kakamega using descriptive statistics and regression analysis. The findings showed that material cost accounting had a favorable correlation with liquidity, return on assets, and return on equity. Businesses need to be more aware of the need of maintaining data for material cost accounting practices.

Imo (2022) examined the Niger Delta area of Nigeria's deposit money banks' financial performance and strategic management accounting. Using a quasi-experimental design, the study was based on contingency theory. The analysis relied on data supplied mostly by thirteen (13) senior staff members and accountants from deposit money banks listed on the Nigeria Stock Exchange. A spearman ranking order correlation and descriptive statistics were used to examine the data. The findings showed that activity-based costing had a favorable association with both ROA and ROE. Strategic management accounting affects the bottom lines of Niger Delta deposit money banks in Nigeria, according to this study's findings. Banks that accept deposits may consider using supply chain management, activity-based costing, and a continuous performance assessment system to boost their bottom line.

Namidu and Akinola (2019) looked at how publicly listed Nigerian manufacturing companies managed their costs and how well they did. The ideas of efficiency structures, resource-based approaches, and portfolio theory provided the theoretical framework for this secondary data study. The secondary data was culled from the 2014–2017 annual financial reports of three publicly listed manufacturing companies. In order to analyze the data, multiple regression analysis was used. Focusing on cost reduction could help industrial businesses in Nigeria enhance their corporate performance, according to the report. The study indicates that profitability is impacted by effective cost management. Due to the substantial impact these processes have on the financial performance of the organization, it was suggested that policymakers and transaction advisors give cost management measures top priority in their implementation.

Gitau (2021) investigated the financial performance of Kenyan agribusinesses after the use of cost management techniques. This study used a descriptive panel research technique grounded on stewardship theory. We used a multiple regression analysis to look at secondary data from Agribusiness companies between 2009 and 2018. The findings showed that operating cost management had a positive and substantial impact on ROI. The research discovered that agribusinesses in Kenya may improve their financial performance by using cost control strategies. One piece of advice was for farmers to be very careful with the money their businesses spent.

Ittner et al. (2002) investigated the connection between target costing and financial outcomes. Researchers looked at data from 179 manufacturing firms and found that target costing was positively connected to higher gross margins and return on sales. Target costing may increase financial performance, according to the research, since it strategically emphasizes cost reduction and aligns with target pricing.

Maiga and Jacobs (2008) looked at data from 169 manufacturing organizations and found that standard costing was associated with improved sales and returns on assets. This study is about the impacts of standard costing. The authors of the research claim that traditional costing systems' tools for evaluating performance and analyzing variances may help companies cut costs where they do not provide value.

Literature Knowledge Gap

The empirical review on the relationship between management accounting practices and financial performance has yet to provide a convincing causal link among measures of economic variables used by various authors. A reasonable conclusion based on previous research is that management accounting

play significant role in determining corporate performance but most of these findings are foreign studies .This is in line with management efficiency theory and agency theory as advocated by the finance and accounting and further accounting principles.

A number of conceptual, empirical and methodological study gaps arise from existing studies of the issues examined in this study. The conceptual gaps arise from the fact that management accounting indicators such as inventory management, budgetary control and cash management cost that determine corporate performance have largely been studied but with little focus on firms manufacturing consumer goods products in Nigeria. Existing studies are subject to lots of criticism as the measures of variables are very limited and one sided; addressing traditional costing methods. The conceptual gaps include lack of consensus and inconsistencies on the effect of management accounting practices on manufacturing firms.

METHODOLOGY

Ex-post facto research design was employed in obtaining, analyzing and interpreting the relevant data for hypotheses testing. The rationale for the variety is that ex-facto research design allows the researcher the opportunity of observing one or more variables over a period of time (Uzoagulu, 1998). It also provides a systematic and empirical solution to research problem by using data that already exist. Specifically, panel data were adopted in data analysis. The population of the study was the entire 20 quoted consumer goods manufacturing firms in Nigeria. The secondary data that was used in this study comprised quantitative data on earnings per share, return on equity, employee training cost, and information as dependent variables while data on the independent variable comprised employee cost of wages and salaries, employee training cost, and employee pension cost. There are several studies performed in the area and the researcher has gathered information from these studies to enhance this research work and to proffer solution to the research problem. Manufacturing firms' annual statements and reports (2014-2023) are deemed to be reliable because they are statutorily required to be audited by a recognized auditing firm before publication.

Method of Data Analysis

To obtain the observed values on the expectation of the impact of management accounting practices on firm performance, panel data analysis for a ten year period was employed. Panel data structure allowed us to take into account the unobservable and constant heterogeneity that was, the specific features of each quoted firm. In addition the researcher employed pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects regression models to test the various hypotheses. Pooled OLS regression technique is popular in financial studies owing to its ease of application and precision in prediction (Alma, 2011).

Further, OLS method has been employed in a wide range of economic relationships with fairly satisfactory results (Koutsoyiannis, 1977). Citing the work of Gaur and Gaur (2006), Ujunwa (2012) stressed that fixed effects and random effects models would aid to observe variations among cross-sectional units simultaneously with variations within individual units over time. It assumed that variables were strictly time disparity or time invariant. This undermined an exploration of the effect of slow changing within individual firms' factors. Hence, the rationale for adopting Fixed Effects and Random Effects models estimator as additional test was to enable the researcher control time contrast and time invariant variables, and thereby control for the effect of the unobserved heterogeneity in the dataset. Ujunwa (2012) opined that coefficient of estimations were reliable when regression parameters do not change over time and do not differ between various cross-sectional units. Therefore, when the regression estimation differ widely between the two models (Fixed and Random Effects models), the adoption of Hausman test would be essential. Panel data over the period from 2010-2019 were used and in line with notable literature, such as the work Onaolapo and Kajola (2010), firm's performance measure was regressed on each of the variants of financial structure and other control variables holding other factors that may affect firm's performance not included in the equation constant. These analytical techniques enabled the researcher attain justifiable and robust results.

$$Y = \beta_0 + \beta_{1Xit} + \mu \quad (1)$$

Where,

Y = Dependent Variable

β_{1Xit} = Independent variable

β_0 = Regression Intercept

μ = Error Term

Disaggregating Equation 3.1 to form the multiple regression models, we have

ROE = $\alpha + \beta_1 IVM + \beta_2 BC + \beta 3CM + \varepsilon_i$ (2)

Transforming equation 2 to econometrics form, we have

Where

ROE = Return on equity of manufacturing firms

IVM = Inventory management measured as value of raw material and work in progress to total operating cost

BC = Budgetary Control measured as percentage of fixed assets to total operating cost

CM = Cash management measured as percentage of net cash flow to total operating cost.

μ = Error Term

$\beta_1 - \beta_4$ = Coefficient of Independent Variables to the Dependent Variables

β_0 = Regression Intercept

Statistical Approach

(i) Coefficient of Determination (R^2): This is used to measure the extent to which the independent variables in the model can explain changes on the dependent variable.

(ii) T-Test: This is used to measure the significance of the independent variables to the dependent variable and the hypothesis was tested at 5% level of significance and at 95% confidence interval. The hypothesis for this test is stated as follows:

Null I hypotheses: H_0:β = 0, (Statistically not significant)

Alternate hypotheses; H_1:β ≠ 0. (Statistically Significant)

And the decision rule states that "H_0" should be rejected when i-statistics is greater than the critical value, but when the T-statistics is lower than the critical value, the "H_0" is accepted with its conclusion.

(iv) F-Test: This is used to find out the overall significance of the regression model at 5% level of' significance. The hypothesis for this test is stated as:

Null Hypotheses; H_0: β_1-β_6 =0 (all slope coefficients are equal to zero)

Alternative Hypotheses: H_0: β_1-β_6 ≠ 0 (all slope coefficients arc not equal to zero)

The decision rule for this test is that "H_0" should be rejected when F-statistics is greater than the critical value of F. hut when the F-statistics is lower, then the 'H0" is accepted while the Hi is rejected.

(v) Test of Autocorre1ation: The Durbin Watson statistics is used in this research to test for the presence of autocorrelation. When there is presence of autocorrelation, the First order autoregressive scheme will be employed to correct ii. The hypotheses states that:

H_0: P = 0 (There is serial independence in the errors)

H_1: P> 0 (There is first order (AR) positive autocorrelation.

When the Durbin Watson Statistics (DW-Stat) is lesser than lower Durbin Watson (D_L), the null hypothesis (H_0) is being rejected hut if the Durbin Watson statistics is greater than the upper Durbin Watson (D_u), the null (H_0) is then accepted.

Panel Data Unit Root Tests

To introduce panel data unit root tests, consider the autoregressive model

$y_{it} = \alpha_i + \gamma_i y_i t-1+ \varepsilon_{it}$ (3)

Which we can rewrite as

$$\Delta y_{it} = \alpha_i + \pi_i y_i t-1+\varepsilon_{it} \quad (4)$$

Where $\pi_i = \gamma_i - 1$. The null hypothesis that all series have a unit root then becomes $H_0 : \pi_i = 0$ for all *i*. a first choice for the alternative hypothesis is that all series are stationary with the same mean-reversion parameter, that is, $H_1 : \pi_i = \pi$ <0 for each country *i*, and is used in the approaches of Levin and Lin (1992) Quah (1994) and Harris and Tzavalis (1999). A more general alternative allows the mean-reversion parameters to be potentially different across countries and states that $H_1 : \pi_i = \pi < 0$ for at least one country *i*. This alternative is used by Maddala and Wu (1999). Choi (2001) ; Im et al (2003) and others. For all tests, the null hypothesis is that the time series of all individual countries have a unit root. This implies that the null hypothesis can be rejected (in sufficiently large samples) if any one of the *N* coefficients π_i is less than zero. Rejection of the null hypothesis therefore does not indicate that all series are stationary. As Smith and Fuertes (2003) notes, if the hypothesis of interest is that all series are stationary (for example, real exchange rates under purchasing power parity. Because of these issues, Maddala et al (2002) argue that for purchasing power parity panel data unit root tests are the wrong answer to the low power of unit root tests, in single time series. The combined test statistics is given by:

$$P = -2\sum_{i=1}^{N} \log\ p_i \quad (5)$$

For fixed *N*, this test statistics will have a Chi-squared distribution with 2*N* degrees of freedom as $T \to \infty$, so that large values of P lead us t reject the null hypothesis, while this test (sometimes referred to as the Fisher test) is attractive because it allows the use of different ADF test and different time-series length per unit. A disadvantage is that it requires individual p-value that has to be derived by Monte Carlo simulations. While the latter test may seem attractive and easy to us, a word of caution is appropriate. Before one can apply the individual ADF test underlying the Maddala and Wu (1999) ; Im et al (2003) approaches, one has to determine the number of lags and determine whether an trend should be included.

Panel Data Co-integration Tests

A wide range of alternative test is available to test for co-integration in a dynamic panel data setting, and research in this area is evolving rapidly. A substantial number of these tests are based on testing for a unit root in the residuals of a panel co-integrating regression. The drawbacks and complexities associated with the panel unit root tests are also relevant in the co- integration case. Several additional issues are of potential importance when testing for co-integration: heterogeneity in the parameter of the co- integrating relationships, heterogeneity in the number of co-integrating relationship across countries and the possibility of co- integration between the series from different alternative estimators are available. With different small and large sample properties (depending upon the type of asymptotic that is chosen).

$$y_{it} = \alpha_i + \beta_i x_{it} + \varepsilon_{it} \quad (6)$$

y_{it} Where both and x_{it} are integrated or order one. Co-integration implies that ε_{it} is stationary for each i. Homogeneous co-integration. In addition Requires that β_I = βIf the co-integrating parameter is heterogeneous. And homogeneity is imposed. One estimate

$$y_{it} = \alpha_i + \beta_i x_{it} + \left[(\beta_i - \beta)x_{it} + \varepsilon_{it}\right] \quad (7)$$

And in general the composite error term is integrated of order one even if ε_{it} is stationary. However, the problem estimator will also average over i, so that the noise in the equation will be attenuated. In many circumstance, when $N \to \infty$ the fixed effect estimator for β is actually consistent for the long-run average relation parameter, as well as asymptotically normal, despite the absence of co-integration (Phillips and Moon, 1999). However, the meaning of this long-run relationship in the absence of co-integration is open to some interpretation (Hsiao. 2003) with heterogeneous co-integration the long-run estimated from the pooled regression may differ substantially from the average of the co-integration parameters averaged over countries (Pesaran and Smith, 1995). Consequently, if there is heterogeneous co-integration, it is much better to estimate the individual co-integrating regressions rather than using a pooled estimator, obviously, this requires $T \to \infty$.

To test for co-integration, the panel data unit root test from the previous section can be applied to the residuals from these regressions provided that the critical values are appropriately adjusted (pedroni, 1999, or Koa, 1999). Recall that these test assume cross-sectional independence. Some test assume homogeneity of the co-integration parameter and use a pooled OLS or dynamic OLS estimator. Additional discussion of these test can be found in Benejeer (1999). With more than two variables, an additional complication may arise because more than one co-integrating relationship may exist for one or more of the countries. Further, even with one co-integrating vector per country, the results will be sensitive to the normalization constraint (left-hand side variable) that is chosen. Finally, the existence of between-country co-integration may seriously distort the result of within-country co-integration tests.

Granger Causality Test

Thus, Granger causality test helps in adequate specification of model. In Granger causality, test, the null hypothesis is that no causality between two variables. The null hypotheses is rejected if the probability of F* statistics given in the Granger causality result is less than 0.05. The pair-wise granger causality test is mathematically expressed as:

$$Y_t \pi_o + \sum_{i=1}^{n} x_1^{\ y}\ Y_{t-1} \sum_{i=1}^{n} \pi_1^{\ x}\ x_{t-1} + u_1 \quad (8)$$

and

$$\mathrm{x_t dp_o} + \sum_{\mathrm{i=1}}^{\mathrm{n}} \mathrm{dp_1^y\ Yt-1} \sum_{\mathrm{i=1}}^{\mathrm{n}} \mathrm{dp1^x x_{y-1}} + \mathrm{V_1} \quad (9)$$

Where x_t and y_t are the variables to be tested white u_t and v_t are the white noise disturbance terms. The null hypothesis $\pi_1^y = dp_1^y = 0$, for all I's is tested against the alternative hypothesis $\pi_1^x \neq 0$ and $dp_1^y \neq 0.$ if the co-efficient of π_1^x are statistically significant but that of $dp1y$ are not, then x causes y. If the reverse is true then y causes x. however, where both co-efficient of π_1^x and dp_1^y are significant then causality is bi –directional.

ANALYSIS AND DISCUSSION OF FINDINGS

The tables below present the dynamic relationship between management and return on equity of quoted manufacturing firms in Nigeria.

Table 1: Presentation of Panel Unit Root Test

Method: Series: ROE	Statistic	Prob.**	Cross-sections	Obs
Series: D(ROE,2)				
Levin, Lin & Chu t*	-16.7176	0.0000	20	120
Im, Pesaran and Shin W-stat	-6.66151	0.0000	20	120
ADF - Fisher Chi-square	123.386	0.0000	20	120
PP - Fisher Chi-square	292.215	0.0000	20	140
Series: D(EPS,2)				
Levin, Lin & Chu t*	-42.3132	0.0000	19	113
Im, Pesaran and Shin W-stat	-11.4462	0.0000	19	113
ADF - Fisher Chi-square	107.450	0.0000	19	113
PP - Fisher Chi-square	259.360	0.0000	19	132
Series: D(CM,2)				
Levin, Lin & Chu t*	-9.51132	0.0000	20	120
Im, Pesaran and Shin W-stat	-3.14143	0.0008	20	120
ADF - Fisher Chi-square	79.6955	0.0002	20	120
PP - Fisher Chi-square	214.216	0.0000	20	140
Series: D(BC,2)				
Levin, Lin & Chu t*	12.3996	0.0000	20	120
Im, Pesaran and Shin W-stat	-2.72754	0.0032	20	120
ADF - Fisher Chi-square	73.4952	0.0010	20	120
PP - Fisher Chi-square	368.052	0.0000	20	140
Series: D(IVM,2)				
Levin, Lin & Chu t* ….	-7.34541	0.0000	19	114
Im, Pesaran and Shin W-stat	-4.41450	0.0000	19	114
ADF - Fisher Chi-square	93.1233	0.0000	19	114
PP - Fisher Chi-square	340.906	0.0000	19	133

Source: Computed from E-view 9.0, 2025

The Im, Pesaran and Shin (IPS), Fisher-ADF and Fisher-PP test are based on this form. To check the stationarity of our data we use the two types of panel unit root tests. As common unit root process we use Levin, Lin and Chu panel unit root test and for individual unit root process we use three type of panel unit root tests, first one is Im, Pesaran and Shin panel unit root test, second is Fisher type test, the ADF-Fisher chi-square test and last one is also a fisher type test, the PP-Fisher Chi square panel unit root test. The result shows that at 5% level of significance we accept null hypothesis that means the series are not stationary for some parameter while some of the variables are stataionary.

After taking the first difference at 5% level of significance we reject null hypothesis, so first difference of the series is stationary. In case of investment policy series in every test except PP-Fisher chi-square at 5% level of significance it reject null hypothesis but PP-Fisher chi-square accept null hypothesis it seems that the series has a unit root. But first difference of the series at 5% level of significance in all case reject null hypothesis. So after taking first difference the series is stationary.

Table 2 Panel Regressions Results: The Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Panel 1:Management Accounting Practices and Return on Equity				
CM	-0.022383	0.032953	-6.679254	0.0000
BC	-0.008680	0.040802	-0.212733	0.8318
IVM	0.041645	0.027684	4.504293	0.0000
C	13.55576	1.806663	7.503204	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.757734	Mean dependent var		14.44754
Adjusted R-squared	0.560049	S.D. dependent var		2.391788
S.E. of regression	2.462554	Akaike info criterion		4.748610
Sum squared resid	1067.294	Schwarz criterion		5.129243
Log likelihood	-449.4867	Hannan-Quinn criter.		4.902662
F-statistic	5.490171	Durbin-Watson stat		2.113720
Prob(F-statistic)	0.000005			

Source: Computed from E-view 9.0, 2025

Interpretation of the Result

Table 2 presents the effect of the management accounting practices on the financial performance of quoted manufacturing firms over the 10 years periods covered in this study. Panel I presents results of effect of management accounting practices on return on. Based on the fixed effect regression model, the adjusted coefficient of determination (Adjusted R^2) indicates that 56 percent variation on the return on equity of the selected manufacturing firms can be traced to variation on the management accounting practices of the firms; this implies that 44 percent variation can be traced to factors not captured in the model. The results of the estimated model proved that the model is statistically significant based on the F-statistics and probability. The Durbin Watson statistics proved the presence of serial autocorrelation among the variables. The regression intercept is positive and significant which implies that holding other variables constant, return on equity of the manufacturing firm will increase by 13.55 units.

Furthermore, the results indicates that cash management l have negative and significant effect, budgetary control have negative and no significant effect while inventory management have positive and significant effect on return on equity of the manufacturing firms.

Table 3 Panel Regressions Results: The Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Panel 1: Management Accounting Practices and Return on Equity				
CM	-0.724805	0.032488	-5.763519	0.0000
BC	-0.610466	0.040438	-4.258804	0.0000
IVM	0.037514	0.025390	1.477539	0.1411
C	13.85856	1.735945	7.983297	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			2.462554	1.0000
Weighted Statistics				
R-squared	0.714866	Mean dependent var		14.44754
Adjusted R-squared	0.600290	S.D. dependent var		2.391788
S.E. of regression	2.392135	Sum squared resid		1115.851
F-statistic	8.980846	Durbin-Watson stat		2.039439
Prob(F-statistic)	0.000007			
Unweighted Statistics				
R-squared	0.514866	Mean dependent var		14.44754
Sum squared resid	1115.851	Durbin-Watson stat		2.039439

Correlated Random Effects - Hausman Test

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		0.526101	3	0.9131
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
CM	-0.022383	-0.024805	0.000030	0.6605
BC	-0.008680	-0.010466	0.000030	0.7427
IVM	0.041645	0.037514	0.000122	0.7082

Source: Computed from E-view 9.0, 2025

Interpretation of the Result

Table 3 presents the effect of the management accounting practices on the financial performance of quoted manufacturing firms over the 10 years periods covered in this study. Panel I presents results of effect of management accounting practices on return on. Based on the fixed effect regression model, the adjusted coefficient of determination (Adjusted R^2) indicates that 60 percent variation on the return on equity of the selected manufacturing firms can be traced to variation on the management accounting practices of the firms; this implies that 40 percent variation can be traced to factors not captured in the model. The results of the estimated model proved that the model is statistically significant based on the F-statistics and probability. The Durbin Watson statistics proved the presence of serial autocorrelation among the variables. The regression intercept is positive and significant which implies that holding other variables constant, return on equity of the manufacturing firm will increase by 13.5 units.

Furthermore, the results indicates that cash management have negative and significant effect, budgetary control have negative and no significant effect while inventory management have positive and significant effect on return on equity of the manufacturing firms.

Results on the cross sectional differences between random and fixed effect models proved that there significant difference between the random effect and the fixed effect models. The question as to whether FEM or REM model is more appropriate is very difficult to answer. Judge et al, (1980) made a few suggestions which are related to the context of the data, and its environment beside the correlation between error component and regressions. If it is assumed to be uncorrelated, random effects may be appropriate, whereas if correlated, fixed effects are unbiased and then are more appropriate. The Haussmann (1978) specification test could also be used to determine the appropriateness of the models, fixed or random effects models. However, econometricians seemed to generally agree that the random effects model was more appropriate to be used if individual intercepts are drawn randomly from a large population. By contrast, the FEM was more appropriate in the case of focusing on specific sets of the firms.

An important test for model specifications was to decide whether the FEM or REM was more appropriate Maddala, (2001). The null hypothesis was that the residuals in the random effects (REM) are uncorrelated with the regressions and that the model was correctly specified. Consequently, the estimated coefficients by the REM or FEM should be statically equal; otherwise, the REM estimator was inconsistent. If the null hypothesis is rejected, then the units' specific effects are correlated with the regressors or the models are not correctly specified (Baltagi 2005). In other words, the null hypothesis stated that individual effects are not correlated with other Regressors in the model. If correlated (Ho is rejected) a random effects model produces biased estimators, so the fixed effects model was preferred (Hun Myoung park, 2005).

To put it more simply, the idea behind this test was that if Ui is uncorrelated with Xt then there was no difference between estimates from both fixed effects (within the group 's estimator) or random effects (GLS estimators) models.

Table 3: Pedroni Residual Cointegration Test

Series: ROE IVM BC CM

	Statistic	Prob.	Weighted Statistic	Prob.
Management Accounting Practices and Return on Equity				
Panel v-Statistic	-0.644918	0.7405	-1.999758	0.0272
Panel rho-Statistic	1.309885	0.9049	1.382809	0.0166
Panel PP-Statistic	-8.047016	0.0000	-7.854653	0.0000
Panel ADF-Statistic	-1.638888	0.0306	-2.231530	0.0128
	Statistic	Prob.		
Group rho-Statistic	3.387363	0.0000		
Group PP-Statistic	-11.40398	0.0000		
Group ADF-Statistic	-2.258375	0.0120		

Source: Computed from E-view 9.0, 2025

The results of the co-integration test proved that the variables are co-integrated as the probability coefficient of the variables are less than 0.05, we accept the alternate hypotheses that there is the presence of long run relationship between the dependent and the independent variables. The presence of long run relationship enables us to test for unit root; the table below has the details.

Table 4.4: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
Management Accounting Practices and Return on Equity			
CM does not Granger Cause ROE	160	0.15420	0.8572
ROE does not Granger Cause CM		1.77186	0.1734
BC does not Granger Cause ROE	160	2.64592	0.0441
ROE does not Granger Cause BC		2.62815	0.0454
IVM does not Granger Cause ROE	158	2.83878	0.0337
ROE does not Granger Cause IVM		1.79293	0.1700

Source: Computed from E-view 9.0, 2025

A variable is said to granger because the other if it helps to make a more accurate prediction of the other variable than if only the past data of the latter was used as predictor (Zou, Guo, & Feng, 2010). Granger causality between two variables cannot be interpreted as a real causal relationship but merely shows that one variable can help to predict the other one better (Zou *et al*., 2010). From the table 4.4, the study found a bi-directional causality from budgetary control to return on equity and a unidirectional causality from inventory management to return on equity.

Table 8: Phillips-Peron results (non-parametric)

Cross ID	AR(1)	Variance	HAC	Bandwidth	Obs
Champion breweries	-0.221	2.047161	2.078245	1.00	9
seven up bottling company	-0.126	2.189683	1.281445	3.00	9
Ashaka cement	-0.229	3.971187	3.753721	1.00	9
Cadbury	-0.434	3.088394	2.212565	3.00	9
UAC	-0.504	4.523689	0.794165	8.00	9
EVANS MEDICAL	0.015	1.746418	1.287366	3.00	9
PABOD BREWERIES	-0.275	1.989312	1.340628	1.00	9
FLOOR MILLS	-0.221	5.409896	2.077924	5.00	9
GUINNESS	-0.149	6.116952	1.517826	4.00	9
GLAXO	-0.190	1.587537	1.227668	4.00	7
LAFARAGE	0.016	5.614717	5.614717	0.00	9
MAY and BAKER	-0.116	3.364592	0.778149	6.00	9
NESTLE	-0.184	5.304396	5.556487	1.00	9
NIGERIA BAG	-0.271	1.503331	0.651132	8.00	9

NIGERIA ROPES	0.054	5.022640	5.902880	1.00	9
NIGERIA BREWERIES	-0.361	2.478305	2.537484	1.00	9
PZ CUSHION	-0.119	2.269348	1.381872	8.00	9
UNILEVER	-0.501	2.345261	1.616852	1.00	9
UNIVERSITY PRESS	-0.334	4.033766	0.568241	8.00	9
VITA FOAM	-0.384	0.753101	0.762921	1.00	9
Augmented Dickey-Fuller results (parametric)					
Cross ID	AR(1)	Variance	Lag	Max lag	Obs
Champion breweries	0.030	0.867541	1	--	8
seven up bottling company	-0.452	1.873068	1	--	8
Ashaka cement	-0.618	3.877057	1	--	8
Cadbury	-0.928	3.173177	1	--	8
UAC	-1.187	3.402719	1	--	8
EVANS MEDICAL	-0.237	1.719183	1	--	8
PABOD BREWERIES	-1.054	1.574013	1	--	8
FLOOR MILLS	-0.295	5.891070	1	--	8
GUINNESS	-0.702	4.424843	1	--	8
GLAXO	-0.205	1.810696	1	--	6
LAFARAGE	0.021	6.004272	1	--	8
MAY and BAKER	-0.699	3.004619	1	--	8
NESTLE	-0.246	5.435640	1	--	8
NIGERIA BAG	-0.864	0.264062	1	--	8
NIGERIA ROPES	0.060	4.419404	1	--	8
NIGERIA BREWERIES	-0.427	2.636921	1	--	8
PZ CUSHION	-0.162	2.081578	1	--	8
UNILEVER	-1.141	2.098439	1	--	8
UNIVERSITY PRESS	-0.929	3.560832	1	--	8
VITA FOAM	-0.560	0.691693	1	--	8

Source: Computed from E-view 9.0, 2025

The result of the power for all the test procedure when the underlying time series model is stationary AR, all the procedures produced a reasonably high power over all the sample sizes and order considered except at order 2 where ADF (Augmented Dickey Fuller) and KPSS produced extremely low power compared to PP. Under this condition, Philip-Peron (PP) has the highest power over all the sample sizes and AR orders considered. The table presents similar analysis on stationary MA, the power of the tests are extremely high over all the sample sizes and orders considered. Similar conclusion as in AR was also observed here. Table 3 presents the power of the mixed model(Stationary ARMA), all the test procedures produced high power over all the sample sizes at order 1 but ADF and KPSS produced low power over all the sample size at order 2 & 3.

DISCUSSION OF FINDINGS

From the estimated regression results based on the validity of the random effect proved that inventory management have positive but no significant effect on the return on equity of the quoted consumer goods manufacturing firms. Beta coefficient of the variable indicates that a unit increase on the variable justifies 0.03 percent increase on return on equity of the manufacturing firms. The positive findings of the study confirmed our a-priori expectations and justify policies formulated by the manufacturing firms to manage cost such as reduction in overhead cost. The positive relationship between inventory management and return on equity confirm the management efficiency theory and validates the agency theory. The theories emphasizes on the role of management policies in maximizing shareholders wealth. The positive effect of the variable confirm the findings of Nwanyanwu, Ogbonnaya and Nkiru (2018) that budgetary control can be used to drive growth and sustainability of Small and Medium sized Enterprises, the findings of Malarvizhi and Ranjanni (2016) no significant relationship between the level of environmental disclosure and firm performance, Oluwagbemiga, Olugbenga and Zaccheaus (2014) that a positive significant

relationship exists between cost management practices and firm's performance in the manufacturing organization.

From the estimated regression results based on the validity of the random effect proved that budgetary control have negative and significant effect on the return on equity of the quoted consumer goods manufacturing firms. Beta coefficient of the variable indicates that a unit increase on the variable justifies 0.6 percent decrease on return on equity of the manufacturing firms. The negative findings of the study contradict our a-priori expectations and contradict policies formulated by the manufacturing firms to manage cost such as reduction in overhead cost. The negative relationship between budgetary control and return on equity contradict the management efficiency theory and invalidates the agency theory. The theories emphasizes on the role of management policies in maximizing shareholders wealth. The negative effect of the variable can be traced to inability of management to trace the increase on the budgetary control. It could also be traced to undue expansion of the manufacturing firms or firm size. The negative effect of the variable contradict the findings of Nwanyanwu, Ogbonnaya and Nkiru (2018) that budgetary control can be used to drive growth and sustainability of Small and Medium sized Enterprises, the findings of Malarvizhi and Ranjanni (2016) no significant relationship between the level of environmental disclosure and firm performance, Oluwagbemiga, Olugbenga and Zaccheaus (2014) that a positive significant relationship exists between cost management practices and firm's performance in the manufacturing organization.

From the estimated regression results based on the validity of the random effect proved that cash management have negative and significant effect on the return on equity of the quoted consumer goods manufacturing firms. Beta coefficient of the variable indicates that a unit increase on the variable justifies 0.72 percent decrease on return on equity of the manufacturing firms. The negative findings of the study contradict our a-priori expectations and also contradict policies formulated by the manufacturing firms to manage cost such as reduction in overhead cost. The negative relationship between cash management and return on equity contradict the management efficiency theory and invalidates the agency theory. The theories emphasizes on the role of management policies in maximizing shareholders wealth. The negative effect of the variable can also be traced to inability of management to trace the increase on the cash management. It could also be traced to undue expansion of the manufacturing firms or firm size. Furthermore, it could be traced to increase in cost production and other internal and external variables. The negative effect of the variable contradict the findings of Akinbor and Okoye (2012) that strategic management accounting enhances competitive advantage although several factors bedevil its adoption in Nigerian manufacturing firms, Ogbadu (2009) that there is need to recognize the materials management function, Dauda, Akingbade & Akinlabi (2010) that strategic management enhances both organizational profitability and company market share.

CONCLUSION

This study examined the relationship between management accounting and return on equity of quoted**.** From the findings, the study concludes that inventory management has positive and no significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria. That budgetary control has negative and significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria. That cash management has negative and significant relationship with return on equity of the food and beverage manufacturing firms in Nigeria.

RECOMMENDATIONS

i. Management of the quoted consumer goods manufacturing firms should be keen on making cost management policies to be applied since they greatly impact on financial performance of the company. Policies regarding to financial performance of companies should incorporate various cost management strategies since they greatly impact financial performance. Financial policies regarding cost management strategies should be formulated and be used keenly and with a lot of controls to avoid critical financial loses.

ii. Management of the consumer goods manufacturing firms should use the costing techniques that are most suitable for their environment such as the level of technological advancement, size of the company, stage of the product and culture.

iii. There should be naturalistic research for the development of cost and management techniques and Management of the consumer goods manufacturing firms should only adopt those techniques that have practical basis and those techniques that their competitors have successfully adopted.

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