



**RESEARCH ARTICLE**

**Responsiveness of Operational Performance to Corporate Charges of Foods and Beverage Manufacturing Firms in Nigeria**

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**ABSTRACT**

This study examined the responsiveness of operational performance to corporate charges of food and beverage manufacturing firms in Nigeria. The specific objectives are; to ascertain the extent to which advertising costs respond to the return on assets, to determine the extent to which audit fees respond to the return on assets, and to evaluate the extent to which interest expense responds to the return on assets of foods and beverage manufacturing firms in Nigeria. The source of data for the study was a secondary source of data. The data was obtained from the financial statement of the firms that were used for the study. The data were analyzed using descriptive statistics, Hausman Specification Test, Panel Data Regression Analysis, and T-Statistics. The result revealed that the significant value of advertising cost in the regression model is 0.1003, which is not significant at a 5% level of significance ( $0.1003 > 0.05$ ), the significant value of audit fee in the regression model is 0.3037, which is not significant at 5% level of significance ( $0.3037 > 0.05$ ), and the significant value of interest expenses in the regression model is 0.3683, which is not significant at 5% level of significance ( $0.3683 > 0.05$ ). We concluded that in line with the results of the analysis that advertising cost, and audit fees positively, but insignificantly respond to the return on assets of the foods and beverage manufacturing firms in Nigeria during the period. We recommended that Foods and beverage manufacturing firm managers in Nigeria should intensify their firm advertising effort so as to increase the corporate performance of their firms.

**Keywords:** Corporate Charges; Operational Performance; Foods and Beverage Manufacturing Firms

**Introduction**

The manufacturing sector of any economy is considered to be exceptionally pivotal as it contributes significantly to the growth and development of the economy, which reflects unmistakably in occupation creation, product provision, and enhanced tax contribution (Gatsi, Gadzo and Kportorgbi; 2013). The contribution of the manufacturing sector of the economy can't be over-emphasized while considering its job in building justification for development, its work possibilities, and financial effects on the economy. Aside from laying foundation for the economy, it additionally fills in as import-substituting industry, providing prepared market for intermediate goods. Subsequently, putting it in Aderibigbe's (2004) thought; the manufacturing industry contributes altogether to the nation's economic development by increasing government income through tax; improving the standard of living; infrastructural growth; contribution to Gross National Products (GNP); business generation; upgrade labor development; and so on.

Up until this point, it has been contended that the quicker pattern through which a nation can accomplish sustainable economic growth and development is neither by the dimension of its invested material resources, nor that of its immense human resources, yet mechanical innovation, venture development and industrial limit. This made it exceptionally pertinent to assess and understand factors that influences the operation performance of these manufacturing firms in Nigeria to determine

the degree to which corporate charges influences them. Okwo, Ugwunta and Agu (2013) state that performance evaluation is the aggregate consideration of factors that might be agent indicators or examination of an individual

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or entity's movement, or performance in reference to a few standards over some undefined time frame. It considers the degree of goal attainment, how things are estimated, and what standards are to be connected.

Hogan and Wilkins (2008) state that operational performance connotes the ratio between a yield gained from the business and input to maintain a business operation. While improving operational performance, the yield-to-input ratio moves forward. Inputs would normally be money (cost), individuals (estimated either as headcount or as the number of full-time reciprocals) or time/effort. Yields would commonly be money (income, margin, cash), new customers, customer reliability, market differentiation, production, innovation, quality, speed and readiness, intricacy or openings. It is in view of the importance of corporate charges on decision-making process of manufacturing firms that the researcher embarked on this study to examine the responsiveness of operational performance to corporate charges of foods and beverage manufacturing firms in Nigeria.

### **Statement of the Problem**

The manufacturing sector is viewed as the oil that greases up the engine of a nation. This is a direct result of their contribution to the economic growth and development of the nation. They accomplish this by providing goods and administrations to the residents at a cheaper rate, creating of work openings, contributing to foreign exchange earnings, and other economic effect of this sector in a nation. The contributions of the manufacturing sector are what made China, Malaysia and Singapore to be considered one of the top commercial focuses on the planet today. A sector that offers this much ought to be treated with some dimension of affectability, in order to battle the economic emergency facing the nation right now. Advertising costs, audit fees, and interest expenses are the center corporate charges of a firm. High charges of these variables have influenced the operational performance of manufacturing firms in Nigeria. Insufficient empirical writing on how corporate charges influence the operational performance of manufacturing firms additionally inspired this study. It is therefore set to study the responsiveness of operational performance to corporate charges of foods and beverage manufacturing firms in Nigeria.

### **Objectives of the Study**

The main objective of the study is to determine the responsiveness of operational performance to corporate charges of foods and beverage manufacturing firms in Nigeria. The specific objectives of the study are;

- I. To ascertain the extent to which advertising cost respond to return on asset of foods and beverage manufacturing firms in Nigeria.
- II. To determine the extent to which audit fees respond to return on asset of foods and beverage manufacturing firms in Nigeria.
- III. To evaluate the extent to which interest expense respond to return on asset of foods and beverage manufacturing firms in Nigeria.

### **Statement of the Hypotheses**

The following hypotheses were formulated to address the research questions;

- I. Advertising cost does not significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria.
- II. Audit fee does not significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria.
- III. Interest expense does not significantly respond to asset of foods and beverage manufacturing firms in Nigeria.

### **Review of Related Literature**

#### **Conceptual Review**

#### **Corporate Charges**

Victoire (2015) states that corporate Charges implies, for any period, the entirety of the following sums (determined without duplication), for each situation to the degree paid in cash by the Borrower during such period and paying little respect to whether any such sum was collected during such period. Corporate charges allude to an ongoing expense of operating a business (Yeboah, 2016). They are the consumption which can't be conveniently followed to or related to a specific cost unit, not at all like operating expenses, for example, crude material and work. Therefore, corporate charges can't be quickly connected with the products or administrations being offered, along these lines

don't specifically create profits. Notwithstanding, Oyerogba, Ezekiel and Olaleye (2014) states that corporate charges are as yet essential to business operations as they give basic help to the business to complete profit-making activities. For instance, overhead costs, for example, the lease for a factory enables specialists to make products which would then be able to be sold for a profit. Such expenses are incurred for yield by and large and not for specific work order.

Overheads are often identified with accounting concepts, such as fixed cost and indirect cost. Overhead expenses are all costs on the income statement except for direct labour, direct materials, and direct expenses (Syeda, Rizvi and Lahore 2011). Overhead expenses include accounting fees, advertising, insurance, interest, legitimate fees, work trouble, lease, fixes, supplies, taxes, telephone charges, travel consumptions, and utilities (Panigrahi, 2013).

Sitienei and Memba (2015) arranged corporate charges into administrative overheads and manufacturing overheads. Administrative overheads include things, for example, utilities, key planning, and different supporting functions. These costs are treated as overheads because of the way that they are not straightforwardly identified with a specific function of the organization nor does it specifically bring about generating any profits. Instead, these costs just interpretation of the job of supporting the majority of the business' other functions. Instances of administrative overheads include; employee salaries, office gear and supplies, outside legitimate and audit fees, company vehicles, travel and entertainment costs, and so on.

Manufacturing overheads on the other hand are altogether costs persevered by a business that is within the physical platform in which the product or administration is made (Okeji, 2008). Contrast between manufacturing overheads and administrative overheads is that manufacturing overheads are ordered within a factory or office in which the deal happens while administrative overheads is regularly classified within some kind of back-office or supporting office. Instances of manufacturing overheads include; employee salaries, depreciation of assets and hardware, property taxes on production offices.

### **Advertising Cost**

Silver, (2010) defined advertising cost as a class included in financial accounting to speak to expenses related with promoting an industry, entity, brand, product name, or explicit products or administrations in order to invigorate a longing to purchase the entity's products or administrations. Advertising costs include space in print and online scenes, communicate time, radio time and post office-based mail advertising.

The American Institute of Certified Public Accountants' (AICPA) Accounting Standards Executive Committee (ASEC) discharged a Statement of Position (SOP 93-7) in 1993 establishing standards for companies that incur advertising costs. SOP 93-7 concluded that advertising costs ought to be recorded as expenses rather than assets: "Reporting the costs of all advertising as expenses in the periods in which those costs are incurred, or the first run through the advertising happens." Rasmussen, (2013) expressed that the advertising cost is the portion of the total marketing spending that is assigned to advertising over a particular time span. The advertising appropriation policy for a company might be founded on any of various methodologies. For instance, spending a sum on advertising that is a settled percentage of sales or dependent on the promotion spend dimension of the competition. In practice, the measure of the advertising appropriation isn't anything but difficult to build up. This is a direct result of the absence of a definite relationship, in many cases, between the measure of advertising and the company's sales and profitability. Advertising appropriation is additionally in some cases alluded to as advertising spending plan.

Advertising expenses include the planning of advertising efforts, for example, market research, budgeting, media investigation, center gatherings and studies. DeAngelo, (2006) is of the view that an advertising spending plan is the sum a company put aside for its promotional activities. Advertising spending plan is utilized by a company for marketing the products and administrations to the customers. Advertising spending plan includes money for doing advertising research, getting creative made, printing material, allocating money to advertising media and ensuring proper implementation of advertisement crusades. The target of a company which markets its products is to win profits and increase brand mindfulness. Advertising targets of a company is simply subject to the advertising effort, kind of customers, advertising media and what the company needs to accomplish. Consequently, for any marketing movement that a company needs to do, it needs to put in some money. This is the reason advertising spending plan is vital. It helps in understanding the destinations.

Advertising is one of the variables which influence sales and subsequently the profit earned. It is therefore hard to compute the sum to be distributed for ad spending plan. Additionally, the budgeting relies upon different other factors like (Deis& Giroux, 2006):

### Audit Fees

The value of an audit lies on the perception coming from clients of audited statements on the auditor's capacity to recognize blunders or ruptures in the accounting framework and to oppose customer weights to unveil such discoveries (Bedard & Johnstone, 2012). Auditing will have value to the degree that clients of financial statements trust that the auditor is able and he won't discard or intentionally pick which findings ought to be accounted for. The calculation of fees is a delicate issue, where professional morals and the interest of auditing did not permit that the prices planned are too high or too low. Chime., Landsman and Shackelford, (2011) propose that the most ideal way – for customers – to charge fees may utilize a settled and invariable value. Nevertheless, this system may prompt high fees, damaging the customer, or low, damaging the auditor, having in mind that prices are planned by taking into account the quantity of hours or days required to conduct the audit. The intuitive pricing of expenses is determined through a straightforward equation between evaluated number of hours (cost) and hourly rate to be connected, which might be communicated by this equation:

$$\text{AudE} = \text{HR} \times \text{RT}$$

Where: AudE: Audit expenses

HR: Estimated number of hours

RT: Hourly rate to be charged

This calculation strategy empowers the auditor to arrange charging additional hours when the measure of hours fundamentally varies from that planned. Brinn, Peel and Roberts, (2009) sets up general perspectives and criteria that the auditor ought to consider while budgeting fees. The factors depicted in this study are intended to guide and set general criteria to determine fees. The examination uncovers the correlation between certain factors, for example, for the situation of administration costs, the assessed hours, and the trouble to set up measurements or intermediaries that permit addressing other factors, for example, specialized qualification of the auditors who will give the administrations.

### Interest Expense

At the point when interest rate ascends, businesses need to pay more for borrowing thereby raising the interest expense. In other words, their cost of taking advance increases which diminishes their profitability and because of decline in profitability market price of their share likewise decline. Besides, an ascent in interest rate likewise diminishes the value of corporate bond. The interest rate that a bond pays to its holder isn't much alluring because of high interest rate (Albertazzi and Gambacorta, 2012). For borrowing and saving there are different kinds of interest rates that bank offers. To set the rate of interest that influence financial framework, national bank assumes a noteworthy job. The national bank executes that activity by controlling the credit rate for interbank. Since it considerably influences the interest rates for advance and savings that commercial banks offer. The main wellspring of commercial bank's income is the interest income by interest rate which is to some degree underneath or over the inter-bank credit rate. Normally, national bank helps up the rate of interest for some causes that might possibly address the intended issue. Inflation is from one of them.

Bourke (2009) expressed that rising interest rate urges the general population to keep their funds with bank by offering hand aggregate saving interest income. Rising interest rate and over spending cause weight on inflation. While on the other hand, when interest rate goes up make borrowing increasingly costly which results into fall in home loan and investment. At last, it influences the cash revaluation to increase the value of money. Besides, enhanced rate of interest may improve the demand of Government Issue bond (Einav, Jenkins and Levin, 2014). The decline in the interest rate as a common standard is most great for the economic air since customers can without much of a stretch pay for taking credit as they don't need to pay higher interest rate for taking the loans. To control the economic development, interest rate is utilized as a gadget. As economy grew quickly it will cause inflation in the economy.

In other words, prices go up to higher point which lessen the buying intensity of individuals which influence the demand of individuals for goods and administrations in light of the shifting availability of bank loans. Be that as it may, on the other hand when interest rates are low the cost of borrowing decline which increase the buying intensity

of open and as result, they will in general make investments and spend in various forms. Lower interest rate likewise offers chance to businesses to take capital investment credit. By making enormous investment in rising sectors and making huge profit, it additionally improves the firm's confidence. As result the economy wind up stable and business openings in the nation increases (Paul, 2011). Another component of lower interest rate is that it decreases the risk of other gathering to inability to pay. It demonstrates that when interest rates are brought down individuals have increasingly extra cash to satisfy their loans and to settle on savings decision. At the point when trade rates decline, the demand for those producers that moves their goods and administrations in international markets increase which upgrade the fares growth and accordingly it will increase aggregate demand and enhances the economy.

### **Operational Performance**

Ahmed & Khan (2015) describes operational performance as the measurable aspects of the outcomes of an organization's processes, such as reliability, production cycle time and inventory turns. Operational performance in turn affects business performance measures such as market share, profit and customer satisfaction. Profitability is the ability of a business to earn a profit. Grimsley (2015) states that a profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business' activities. Watkins (2007) defined performance as valuable results, accomplishment, or contributions of an individual or an organization, regardless of preferred or mandated process.

Ramiz & Junrul (2014) state performance as an achievement of tangible, specific, measurable, worthwhile and personally meaningful goals. Performance is the ability of an organization to gain and manage the resources in several difference ways to develop a competitive advantage. The purpose of measuring performance is to obtain useful information relating to flow of funds, the use of funds, effectiveness, and efficiency. Besides, the information can also motivate the manager to make the best decision. Literature often classifies firms' performance in several ways, for the purpose of this study however, performance will be explored from two ways: financial performance and operational performance, (the two being interconnected). LaMarco (2019) states that there are many ways to measure the operational performance of a firm so as to determine if it is doing well. The most common method is to look at its gross or net profit. Some of the most popular types of performance measures are return on assets, return on equity, return on capital employed, earnings per share, dividend per share, net profit margin, gross profit margin among others. This study adopted return on assets to measures its responsiveness to corporate charges of foods and beverage manufacturing firms in Nigeria

### **Return on Assets**

Firer, Ross, Westerfield & Jordan (2004) describes return on assets is a measure of a firm's profit generated relative to its investment in assets. It provides an indication of whether a firm's assets are under or over utilized. It is thus an indicator of operating performance. Haniffa & Huduib, (2006) also defines return on assets as an indicator of how profitable a firm is relative to its total assets. It gives an idea as to how efficiently management is using its total assets to generate earnings for the firm. Return on assets is calculated by dividing a firm's annual earnings by its total assets. Return on assets is usually stated as a percentage. The measurement is such that the higher the return on assets, the more effective management uses the firm's total assets to the advantage of the shareholders. Fitzsimmons, (2005) states that the return on assets figure gives investors an idea of how effectively the company is converting the money it has to invested into net income. The higher the return on assets number, the better, because the company is earning more money on less investment.

Dalvi & Baghi (2014) asserts that because of the difference in the amount of capital invested by different firms, return on assets enables comparison to be mad between the earnings of firms of different sizes, small, medium and large firms. The ratio of return on assets reflects the proportion of capital invested by each firm in an attempt to compare the performance of the firms. An increase in investment that is not properly managed and coordinated can never maximize benefits to the investors. Therefore, it provides investors with the necessary measurement required to ascertain how well management has managed and coordinated the capital they invested in the firm.



## Theoretical Reviews

Two theories are used to support this study. The theories are: Growth of the Fitter Theory was propounded by Alchian in 1950 and Constraint Growth Theory propounded by Goldratt in 1990. The study is anchored on Growth of the Fitter Theory because it is well suited for the study.

### Growth of the Fitter Theory

Growth of the Fitter Theory was propounded by Alchian (1950). According to this theory, fitness is depicted by the firm profit, and the profitable firms grow and survive in the market while the other firms exit due to poor performance (Kouser et al., 2012). Alchian (1950) theoretical study argued that fitter firms grow and survive, but less vigorous firms lose their market share and exit through the evolutionary selection mechanism. Thus, if profit rates reflect the degree of fitness, it is possible to predict that profitable firms will grow (Jang and Park, 2011). Delmar et al (2003) suggests that more profitable firms may have higher potential to grow, since they have already shown a greater fit with the environment and may be able to fund future competitive actions with their own cash flow.

Profitability limits the risk related to acquiring and relying on external resources of financing but also displays a satisfactory level of market demand. Some studies posit that profit provides the funds for growth. A firm can grow internally through investments in development projects in various ways. It can take advantage of technological opportunities to grow through research and development, leading to product and process innovations. Empirically, firm growth and profitability both are of great concern for the organization but there is still no generalized relationship between them.

### Financing Constraint Growth Theory

The theory was propounded by Goldratt in 1990. Goldratt argues that firms which do not make profit, does not have a buffer to invest and will not be able to finance their growth or at least their sustainability, and will finally disappear. Here, the buffer is the retained earnings, which will be small if the company does not make profit or decides to allocate all of its profit to the shareholders. This buffer equals to the internal capital, which is preferred to external capital according to the Pecking Order Theory. Put in another way, the theory states that the companies which generate profit and then retain it, avails themselves of good growth opportunities while the companies having no or low profits cannot avail good investment opportunities, so they do not grow rapidly (Jang and Park, 2011). Also, Wagenvoort (2003) state that small firms will face more financial distress, hampering the growth of these companies. Bechetti and Trovato (2002) and Carpenter and Petersen (2002) believe that the constraints mostly affect the growth of small firms. Oppositely, larger firms will face fewer financial constraints and are more likely being exempted to safeguard profitability. Consequently, larger firms will exploit profitability more accurately and profoundly, leading to more investments and a quicker growth process.

### Empirical Review

Xu, Liu & Chen (2019) studied investigated the among research and development, advertising and financial performance of firm listed in South Korea from 2012 to 2016. A sample of 589 listed firms listed on Korea Stock Exchange was taken for the study. Data Guide database was used to collect accounting information during 2012-2016 from the sampled firms. Both descriptive statistics and correlation analysis were used to analyze the data collected from the sample firms. Results from the analysis show that R&D and advertising are complementary in South Korea. Second, for large firms, advertising is positively and significantly associated with financial performance, while research and development expenditure has no significant influence. Finally, research and development and advertising expenditures have a negative impact on the financial performance of small firms.

Acar & Temiz (2017) conducted a study to examine the effectiveness of advertising on financial performance of Banking Sector of Turkey. Specifically, the association between banks' advertising expenses and accounting measures of income and profitability for banking sector was analyzed.

A total population of 51 banks listed in Turkish Stock Exchange as at 2014 were targeted for the study. The 51 banks comprised of 34 deposit banks, 13 development and investment banks and 4 participation banks. Financial data on these banks were obtained from the statistical reports listed in the database of Banks Association of Turkey, Banking Regulation and Supervision Agency and partly from Thomson Reuters Data stream Eikon. Advertising expenses is

the independent variable while return on assets, interest income and total operating income were the dependent variables. Multiple regression analysis was adopted and was used to analyze the data collected from the banks. Results of analysis disclose that a significant and positive association exist between advertising expenses and financial performance. The extent to which advertising has long-term benefits was also examined and a positive association between advertising expenses and financial performance that extend over time was detected, thereby suggesting that advertising expenses should be capitalized and then amortized instead of being written off in the period of the expenses.

Onaolapo, Ladoke and Ajulo (2017) considered the effect of audit fees on audit quality: proof from manufacturing companies in Nigeria from 2010 to 2015. Their goals were; to investigate the relationship between audit expense and audit quality of listed manufacturing firms in Nigeria, to examine the linkage between Auditor's residency and audit quality of the listed firms and to determine the relationship between customer size and audit quality of the firms. Secondary data were obtained from the selected manufacturing firms for a period of six years (2010-2015). Ordinary Least Square Model estimation was utilized to investigate the relationship between independent and dependent variables. Findings from the study demonstrate that audit fee, audit residency, customer size and leverage ratio display a significant positive relationship with audit quality given coefficient of determination (R<sup>2</sup>) of 0.6006 and a combined p-value of 0.001 and F-Statistics of 7.14. This infers the prescient intensity of the independent variables as used to explain changes in audit quality is about 60%. Audit expense specifically demonstrates a critical positive effect on audit quality with a t and p-values of (4.04 and 0.001) respectively. The study recommended that Government through the different professional bodies ought to create regulations that will help enhance audit quality in Nigeria.

Santos, Cerqueira & Brandão (2016) examined whether audit and non-audit fees are associated with firm performance. This relationship was analyzed taking into consideration the impact of operating and corporate governance characteristics on firm performance. A total of 500 non-financial firms in the American Stock Market Exchange, (Standard and Poor) was sampled covering the period from 2002 to 2014. The independent variables of the study are, audit fee and non-audit fee while the dependent variables and proxies for financial performance are return on assets, return on equity, earning power and Tobin Q ratio. Many control variables were introduced including, assets, capital intensity, research and development intensity, leverage, sales growth, board size among others. Multiple regression model was used to analyze the data collected from the sample firms. The hypotheses confirmed that there is a significant negative relationship between audit fees and firm performance measures and also a significant negative relationship between non-audit fees and performance measures. This suggests that the increase (decrease) in corporate performance is related to the decrease (increase) in non-audit fees. Furthermore, this study highlights the possible matter of providing non-audit services jointly with audit services, confine the functions of an auditor and consequently compromise the independence, that ultimately decrease the firm performance.

Lasisi & Nuhu (2015) examined the cost control and its effect on the survival of Nigeria firms using Nigeria Bottling Company Plc, Plateau State. The study was to examine the significance of cost control and the different cost control strategy utilized and their effect on the survival of Nigeria firms. The study used structure questionnaire to collect primary data from 30 randomly chosen respondents from the Nigeria Bottling Company Plc (NBC) Jos plant, Plateau State, Nigeria. The scoring on the questionnaire was done using a five-point Likert scale. The secondary information sources included diary articles, books, newspaper articles, company financial reports and internet. The study adopted t-test, frequency tables and percentage were utilized to test the hypotheses and the centrality level was  $\alpha=0.05$ . The research discovered that 70% of the respondents was of the view that cost control has incredibly helped in boosting profitability in the company and 13.3% was undecided while 16.7% oppose this idea. 79% of those talked about with, strongly concur that cost management has helped the profitability of the company while 7% differ and 14% undecided. It was recommended that systems for conducting value investigation should be set. Also budgeting procedure should likewise be put in place to control cost.

Oyerogba, Ezekiel & Olaleye (2014) examined cost management practices and firm's performance of manufacturing organizations in Nigeria from 2003 to 2012. The study investigated the relationship between cost management practices and firm's performance in the manufacturing in firms in Nigeria. Forty (40) manufacturing firms listed on the Nigeria Stock Exchange during the period of 2003 to 2012 were sampled for the study. Secondary data were collected from the annual financial statement of the selected firms. Four hypotheses were formulated for the study were tested using t-statistics. Coordinate material cost, coordinate work cost, production overhead cost and administrative overhead cost were taken as independent cost management variables while profitability (Operating profit) was taken as dependent variable representing the firm's performance. Result shows that a positive

noteworthy relationship exists between cost management practices and firm's performance in the manufacturing organization. It is therefore prescribed that a cost reduction methodology with accentuation on production overhead cost and administrative overhead cost ought to be set out upon if their profit maximization and wealth creation objective must be accomplished.

### Methodology

The researcher adopted an ex-post facto design. The choice of the ex-post facto design is because the research will rely on already recorded events, and researchers do not have control over the relevant dependent and independent variables they are studying with a view to manipulating them. The study was conducted in Nigeria and precisely on foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period. The source of data for this study was a secondary source of data. The data to be used for this study was obtained from the financial statement of the firms that were used for the study. The population of the study the fifteen (15) and the sample size of the study consisted of five (5) food and beverage manufacturing firms. The firms included; Guinness Nigeria Plc, Nigeria Breweries Plc, Cadbury Nigeria Plc, Unilever Nigeria Plc, and Nestle Nigeria Plc. The researcher applied the following statistical and econometric techniques for the analysis and test of the hypothesis. Descriptive Statistics, Hausman Specification Test, Panel Data Regression Analysis, and T-Statistics.

### Model Specification

The following model was used to evaluate the study;

$$ROA = F(AC, AF, IE) \quad (1)$$

Where;

ROA = Return on Assets (it is used as a proxy for operational performance)

AC = Advertising Costs (it is used as a proxy for corporate charges)

AF = Audit Fees (it is used as a proxy for corporate charges)

IE = Interest Expenses (it is used as a proxy for corporate charges)

In a linear regression form, it is written as;

$$ROA = \beta_0 + \beta_1 AC + \beta_2 AF + \beta_3 IE + \mu \quad (2)$$

$\beta_0$  = Constant Term

$\beta_1$  = Coefficient of advertising cost

$\beta_2$  = Coefficient of audit fees

$\beta_3$  = Coefficient of interest expense

$\mu$  = Error Term

### Data Presentation and Analysis

#### Data Presentation

This study explored the responsiveness of operational performance to corporate charges of foods and beverage manufacturing firms in Nigeria from 2010 to 2019. Secondary data were sourced from the annual report and accounts of the five selected foods and beverage manufacturing firms. The data collected were logged and analyzed using panel data regression analysis. The logged data are presented in table 4.1.1 while the raw data are presented as appendix one of the studies.

#### Data Analysis

The secondary data obtained from the sampled foods and beverage manufacturing firms in Nigeria were analyzed using panel data regression analysis and the results presented in tables 1 to 2.



**Table 1: Descriptive Statistics**

	ROA	AC	AF	IE
Mean	0.107562	6.891148	4.482623	6.180127
Median	0.092231	6.929169	4.482716	6.377886
Maximum	0.264935	7.460133	4.788451	6.917593
Minimum	-0.071565	6.372277	4.162535	4.649306
Std. Dev.	0.078452	0.299130	0.145254	0.583191
Skewness	0.131266	0.157000	-0.038536	-1.009204
Kurtosis	2.798581	2.952626	2.932742	2.925119
Jarque-Bera	1.481655	2.075237	0.021800	7.819192
Probability	0.476719	0.354297	0.989159	0.020049
Sum	5.378107	344.5574	224.1312	284.2859
Sum Sq. Dev.	0.301579	4.384445	1.033836	15.30502
Observations	46	46	46	46

**Source: Author's E views Output**

Presented in Table 1 is the result of the descriptive statistics of the variables used in the study. The variables are, return on assets (ROA), advertising cost (AC), audit fee (AF) and interest expenses (IE). Results of the analysis show that the mean value of the variables are: 0.107562, 6.891148, 4.482623 and 6.180127 respectively while the values of the standard deviations are: 0.078452, 0.299130, 0.145254 and 0.583191 respectively. These results imply that all the variables are significantly volatile except return on assets with a low volatile. The high volatile signify that the variables are unpredictable during the period.

Results from the table equally show the Skewness coefficients of the variables are: 0.131266, 0.157000, -0.038526, and -1.009204 for return on assets, advertising cost, audit fee and interest expenses respectively. Since the Skewness coefficient of these variables cannot be approximated to the benchmark rate of one, it indicates that the data set is not normally distributed. Results from the Kurtosis test, however, states otherwise. The Kurtosis results show that Kurtosis coefficients of all the variables can be approximated to three, thus indicating that the data set is normally distributed. Results of the Jarque-Bera test also affirm that the data set is normally distribution. This is because the Jarque-Bera coefficient of all the variables are significant at 0.05 level of significance (Prob<0.05). Thus, confirming the Kurtosis results that the data is normally distributed.

**Table 2: correlated Random Effects- Hausman Test**

Correlated Random Effects - Hausman Test  
 Equation: Untitled  
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.609170	3	0.4559

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var (Diff.)	Prob.
AC	-0.010168	0.013376	0.000292	0.1682
AF	-0.215590	-0.193701	0.000305	0.2103
IE	-0.043927	-0.042511	0.000005	0.5383

**Source: Author's E-View Output**

In order to choose an appropriate model for the study Hausman test was conducted using the Random Effect Model and Fixed Effect Models. In Hausman test, Random Effect Model is the null hypothesis while the Fixed Effect Model is the alternative hypothesis.

**H<sub>0</sub>:** Random Effect Model is the appropriate model for the study.

**H<sub>1</sub>:** Fixed Effect Models is the appropriate model for the study.

Result of the Hausman Specification test, reveals that Random Effects Regression Model is the right model for the study. This is because the Hausman p-value of 0.4559 is not significant at 5% level of significance (0.4559>0.05). Because of this, the null hypothesis is accepted while the alternative is rejected. Therefore, between the two models, Random Effects Model is the right model for the study.

**Table 3: Panel Regression Result (Random Effect Model)**

**Multiple Regression**

Dependent Variable: ROA

Method: Least Squares

Date: 03/19/21 Time: 15:20

Sample: 1 50

Included observations: 46

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005483	0.363449	0.015086	0.9880
AC	0.123937	0.073759	1.680309	0.1003
AF	0.134281	0.128945	1.041378	0.3037
IE	-0.023991	0.026380	-0.909434	0.3683
R-squared	0.564212	Mean dependent var		0.111360
Adjusted R-squared	0.472630	S.D. dependent var		0.080325
S.E. of regression	0.080431	Akaike info criterion		-2.119899
Sum squared resid	0.271702	Schwarz criterion		-1.960887
Log likelihood	52.75768	Hannan-Quinn criter.		-2.060332
F-statistic	0.960649	Durbin-Watson stat		1.794568
Prob(F-statistic)	0.049211			

**Source: Author's E-View Output**

Result of the panel data regression analysis presented in table 3 indicates that the adjusted R-square ( $R^2$ ) is 0.564212, suggesting that about 56% of the variation in return on assets of the firms is explained by the independent variables (advertising cost, audit fee and interest expense) while the remaining 44% is explained by error terms and other factors not captured in the model of the study. The coefficient of F-Statistics which is 52.75768 is equally significant at 0.05 level of significance (0.049211<0.05). This implies that the entire model is significant in predicting the return on assets of the firms during the period. Durbin Watson Statistics (DWS) coefficient of 1.794568 can also be approximated to 2, indicating that there is no autocorrelation in the model of the study.

**Test of Hypotheses**

**Decision Rule:**

Level of significance ( $\alpha$ ) = 0.05. Reject the null hypothesis if the significant value in the regression coefficient is less than the level of significance (0.05), otherwise accept the null hypothesis. In line with this decision rule, the results of the test of hypotheses are hereby presented below:

**Test of Hypothesis One**

**H<sub>0</sub>:** Advertising cost does not significantly respond to the return on assets of foods and beverage manufacturing firms in Nigeria.

**H<sub>1</sub>:** Advertising costs significantly respond to the return to assets of food and beverage manufacturing firms in Nigeria.

From table 3 the significant value of advertising cost in the regression model is 0.1003, which is not significant at 5% level of significance ( $0.1003 > 0.05$ ). Therefore, we accept the null hypothesis that advertising cost does not significantly respond to the return on assets of food and beverage manufacturing firms in Nigeria

#### **Test of Hypothesis Two**

**H<sub>0</sub>:** Audit fee does not significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria. Advertising cost does not significantly respond to the return on assets of food and beverage manufacturing firms in Nigeria

**H<sub>1</sub>:** Audit fees significantly respond to the return on assets of food and beverage manufacturing firms in Nigeria.

From table 3 the significant value of audit fee in the regression model is 0.3037, which is not significant at 5% level of significance ( $0.3037 > 0.05$ ). Therefore, we accept the null hypothesis that audit fee does not significantly respond to the return on asset of food and beverage manufacturing firms in Nigeria.

#### **Test of Hypothesis Three**

**H<sub>0</sub>:** Interest expense does not significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria.

**H<sub>1</sub>:** Interest expense significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria

From table 3 the significant value of interest expenses in the regression model is 0.3683, which is not significant at 5% level of significance ( $0.3683 > 0.05$ ). Therefore, we accept the null hypothesis that interest expense does not significantly respond to return on asset of foods and beverage manufacturing firms in Nigeria.

### **Discussion of Results**

#### **Hypothesis One**

From the test of hypothesis one, the null hypothesis was accepted while the alternative was rejected, implying that advertising cost does not significantly respond to return on assets of the firms. The regression coefficient of advertising cost in the regression model is positive at 0.123937. Thus, advertising cost positively, but non-significant respond to return on assets of foods and beverage manufacturing firms in Nigeria during the period. T-test result from the regression table equally affirms this result. The coefficient of t from the table is 1.680309 which is positive, but less than 2 indicating that advertising cost positively, but insignificantly respond to return on assets of the firms during the period.

The result is consistent with the findings of Musa & Shehu (2014) considered effect of audit quality and financial performance of quoted bond firms in Nigeria and recommended after the study that the management of quoted bond firms in Nigeria increase the remuneration of auditors in order to enhance their financial performance.

Onaolapo, Ladoke & Ajulo (2017) considered the effect of audit fees on audit quality found that audit expense specifically demonstrates a critical positive effect on audit quality. Griffin, Lont & Sun (2008) considered the controversial relationship between corporate administration and audit fees using ordinary least squares. None of the studies reviewed is inconsistent with the result of the study.

#### **Hypothesis Two**

From the test of hypothesis two, the null hypothesis was accepted while the alternative was rejected, indicating that audit fee does not significantly respond to return on assets of the firms. However, the regression coefficient of audit fee in the regression model is positive at 0.134281. Therefore, advertising cost positively, but non-significant respond to return on assets of foods and beverage manufacturing firms in Nigeria during the period. T-test result from the regression table is also in line with this finding. The coefficient of t from the table is 1.041378 which is positive, but less than 2 indicating that audit fee positively, but insignificantly responds to return on assets of the firms during the period.

The result is also consistent with the findings of Musa & Shehu (2014) considered effect of audit quality and financial performance of quoted bond firms in Nigeria and recommended after the study that the management of quoted bond firms in Nigeria increase the remuneration of auditors in order to enhance their financial performance.

Onaolapo, Ladoke & Ajulo (2017) considered the effect of audit fees on audit quality found that audit expense specifically demonstrates a critical positive effect on audit quality. Griffin, Lont & Sun (2008) considered the controversial relationship between corporate administration and audit fees using ordinary least squares. None of the empirical works reviewed is inconsistent with the result of this study.

### Hypothesis Three

From the test of hypothesis three, the null hypothesis was also accepted and the alternative rejected, meaning that interest expenses of the firms do not significantly respond to the return on assets. The regression coefficient of interest expenses in the regression model is negative at -0.023991. Therefore, interest expenses negatively, but non-significant respond to return on assets of foods and beverage manufacturing firms in Nigeria during the period. T-test result from the regression table equally affirms this result. The coefficient of t from the table is -0.909434 which is negative, but less than 2 indicating that interest expenses negatively, but insignificantly respond to return on assets of the firms during the period.

The result is also consistent with the findings of Oyerogba, Ezekiel & Olaleye (2014) who explored cost management practices and firm's performance of manufacturing organizations and found that a positive noteworthy relationship exists between cost management practices and firm's performance in the manufacturing organization. None of the studies reviewed is inconsistent with the finding of the study.

### Summary of Findings

Based on the data analysis of the study, the findings and discussions of findings, we summarize the findings of as follows;

- I. Advertising cost positively but non-significantly respond to return on assets of foods and beverage manufacturing firms in Nigeria during the period. This is confirmed by the regression coefficient of advertising cost of 0.123937 which is not significant at 5% level of significance ( $0.1003 > 0.05$ ).
- II. Audit fee positively, but insignificantly respond to return on assets of foods and beverage manufacturing firms in Nigeria. This can be confirmed from the regression coefficient of the audit fee of 0.134281 which is not significant at 5% level of significance ( $0.3037 > 0.05$ ).
- III. Interest expenses negatively and non-significantly respond to return on assets of foods and beverage manufacturing firms in Nigeria. This can be seen from the regression coefficient of interest expense in the regression model which is -0.023991 and which is not significant at 5% level of significance ( $0.3683 > 0.05$ ).

### Conclusion

This study explored the responsiveness of operational performance to corporate charges of food and beverage manufacturing firms in Nigeria. A population of fifteen (15) food and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period were targeted, out of which five (5) of them were sampled for the study. The study adopted *ex-post facto* research whereby secondary data were collected from the selected firms and analyzed using panel data regression analysis. Descriptive and t-statistics were also used in analyzing the data collected for the study. We conclude in line with the results of the analysis that advertising cost, and audit fee positively, but insignificantly respond to the return on assets of the foods and beverage manufacturing firms in Nigeria during the period. It is also the conclusion of this study that interest expenses negatively and insignificantly respond to return on assets of the firms during the period under review.

### Recommendations

Based on the findings of the study, the discussions, and the conclusions, the researcher hereby recommends that;

- I. Foods and beverage manufacturing firm managers in Nigeria should intensify their firms advertising efforts so as to increase the corporate performance of their firms. This can be done through electronics and printed media to reach both urban and rural target markets with food and beverage products.
- II. Foods and beverage manufacturing firms in Nigeria should also engage the services of big professional audit firms in Nigeria such as Price Water House Coopers, Akintola Willams, and Deliot among others in order to increase their corporate performance and maximize value for shareholders. The services of these notable audit firms will increase the audit fees of the firms and at the same time increase the confidence of public investors and other financiers. This will attract public investors and increase the stock of capital available for the foods and beverage firms to maximize corporate performance, particularly return on assets.
- III. Lastly, the manufacturing firm should reduce interest expenses in order to increase the return on assets. This is because interest expenses negatively respond to the corporate performance of the firms. Interest expenses can be reduced by using trade credit and retained earnings as alternative sources of financing rather than bank loans and overdrafts. Moreover, the increase in stakeholders' confidence in the firms will boost the negotiating power of the firm managers thereby bringing down interest expenses.

## References

- Abdulraheem, A., Yahaya, K. A., Isiaka, S. B. & Aliu, O. A. (2011). Inventory management in small business finance: Empirical evidence from Kwara State, Nigeria, *British Journal of Economics, Finance and Management Sciences*, 2(1), 49 - 57
- Acar, M & Temiz, H (2017). Advertising effectiveness on financial performance of banking sector: Turkey case. *International Journal of Bank Marketing*, 35(4), 649-661.
- Alchian, A. A., (1950). Uncertainty, Evolution and Economic Theory. *Journal of Political Economy*, 1(58), 211–222.
- Ahmed, A.H & Khan, A.T.M.S (2015). Operational performance and profitability: An empirical study on the Bangladeshi Ceramic Companies. *International Journal of Entrepreneurship and Development Studies*, 3(1), 63-73.
- Akeen U.O. (2011). Customer attitude towards internet advertising and online sales. (A case study of Mtn. Nigeria), *Journal on Computer Engineering and Intelligent System*, 4(2), 45 - 50
- Ann K.H, Kissan, J. & Manfred, K. (2008). Price delegation in sales organizations: an empirical investigation. *BuR - Business Research Official Open Access Journal* 1(2), 22-134.
- Augustine, A. N. & Agu, O.A. (2013). Inventory Management on organizational effectiveness. *Information and Knowledge Management Journal*, 3(8), 92 – 100.
- Audretsch, D.B. and Elston J.A. (2002). Does firm size matter? Evidence on the impact of liquidity constraints on firm investment behavior in Germany. *International Journal of Industrial Organization*, 20 (1), 1-17.
- Bardi, G. & John N. (2016). Advertising practice in Nigeria: development, new trends, challenges and prospects. *International Journey of Social Sciences* 3(2), 122-213.
- Becchetti, L. and G. Trovato, (2002). The Determinants of Growth for Small and Medium Sized Firms: The Role of the Availability of External Finance. *Small Business Economics* 19(4), 291-306.
- Budambula, V. T. (2014). Effects of working capital management on profitability of tea trading companies – A case of Chai Trading Company Limited, *Research Journal of Finance and Accounting*, 5(7), 86 00– 93.
- Costas, A. (2007). Market penetration costs and the new consumers margin in international trade. *International Journal of Reserve Bank of Minneapolis*, 2(6), 80 – 95.
- Ebenezer, A. B. & Asiedu, M. K. (2013). The relationship between working capital management and profitability of listed manufacturing companies in Ghana. *International Journal of Business and Social Research*, 3(2), 25 – 34.
- Dalvi, M.R & Baghi, E (2014). Evaluate the Relationship between Company Performance and Stock Market Liquidity. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 136-144.
- Davis, P.J. (2004). Effective communication strategies in a franchise organization: A case of bakers delight holdings. Australia. *Corporate Communications International Journal*, 4(4), 276- 282.
- Deloof, D. (2013). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*, 30(3&4), 573 – 587.
- Falope, O. L. & Ajirole, O. T. (2009). Working capital management and corporate profitability: Evidence from panel data analysis of selected quoted companies in Nigeria, *Research Journal of Business Management*, 3(12), 73-84.



- Fitzsimmons, J.R., Steffens, P.R., and Douglas E.J. (2005). Growth and profitability in small and medium sized Australian Firms. AGSE Entrepreneurship Exchange, Melbourne, February 2005.
- Firer, C., Ross, S.A., Westerfield, R.W. and Jordan, B.D. (2004) Fundamentals of Corporate Finance. 3rd ed. Berhshire: McGraw Hill.
- Haniffa R & Hubaib, M. (2006). Corporate governance structure and performance of Malaysia listed companies. *Journal of Business Finance and Accounting*, 33(7-8), 1034-1062.
- Hassan, N. U., Imran, M.M., Amjad, M.& Hussain, M. (2014). Effects of working capital management on firm performance: An empirical study of non-financial listed firms in Pakistan. *International Journal of Academic Research in Business and Social Sciences*, 4(6), 114 – 132.
- Goldratt E.M. (1990) What is this thing called the theory of constraints? *North River Press*, Croton-on-Hudson, NY.
- Imoleayo, F.O. (2010). The impact of product price changes on the turnover of small and medium enterprises in Nigeria. *International Journal of Broad Research in Accounting, Negotiation, and Distribution* 1(2), 2067-8177.
- Kennedy, N. O., Consolata, N. & Kibabii V. A. (2013). Effects of sales revenue by use of mobile phone money transfer on the profitability of the micro and small enterprises in bungoma county'. *International Journal of Management and Business Research*, 2(19), 213-241.
- Keitany, P. J., Wanyoike, D. M & Richu, S. (2014). Assessment of the role of materials management on organizational performance – A case of New Kenya Cooperative Creameries Limited, *European Journal of Materials Sciences*, 1(1), 1-10.
- Kouser, R., Bano T., Azeem M & Hassan M, (2012). Inter-relationship between profitability, growth and size: A case of non-financial companies from Pakistan. *Pakistan Journal of Commerce & Social Sciences*, 6(2): 405-419.
- LaMarco, N (2019). Objectives of Operational Performance.  
<https://smallbusiness.chron.com/objectives-operational-performance-77937.html>
- Larry, L. Annette, P. & Reni S. (1995). Asset sales, firm performance, and the agency costs of managerial discretion. *Journal of Financial Economics*, 37(1995), 3–37.
- Lasisi, I. O. & Nuhu, F.T. (2015). Cost control and its impact on the survival of Nigeria firms: a case study of Nigeria bottling company Plc. *International Journal of Management, Accounting and Economics*, 2(12), 83-29.
- Lwiki, T., Ojera, P. B., Mugenda, N. G. & Wachira, V.K. (2013). The impact of inventory management practices on financial performance of sugar manufacturing firms in Kenya. *International Journal of Business, Humanities and Technology*, 3(5), 75-85.
- Madhobi & Tiasha (2019). Effect of advertising expenses and sales incentives on financial performance. *Business and Economic Research Journal*, 9(1), 69-83.
- Mohamad, S. J. A. N., Suraidi, N. N., Rahman, N. A. & Suhaimi, R. D. S. (2016). A study on relationship between inventory management and company performance: A case study of textile chain store. *Journal of Advanced Management Science*, 4(4), 299-304.
- Monametsia, G.L & Agashab, E (2020). Audit quality and firm performance: Evidence from Botswana and Uganda. *Journal of Accounting, Finance and Auditing Studies*, 6(4),79-95
- Moutinho, V, Cerqueira, A & Branddao, E (2012). Audit fees and firm performance. *SSRN Electronic Journal*, 5(1), 102-121.
- Ogbo, A. L., Onekanma, I. V. & Ukpere, W. I. (2014). The impact of effective inventory control management on organizational performance: A study of 7up bottling company Nile mile Enugu, Nigeria, *Mediterranean Journal of Social Sciences*, 5(10), 109 – 118.

- Olufayo, T.O. Ladipo, P.K.A. & Bakare, R.D. (2012). Effect of Advertising on the Patronage of a New Product. *International Journal of Humanities and Social Science* 2(7), 17-20.
- Onaolapo, A. A, Ajulo, O. B & Onifade. H. O (2017). Effect of audit fees on audit quality: Evidence from Cement Manufacturing Companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 5(1), 6-17.
- Onditi, A.A. (2012). An Evaluation of Promotional Elements Influencing Sales of an Organization: A case study of Agricultural and Non- Agricultural products among women groups, Homa Bay District, Kenya. *International Journal of Business and Social Science*, 3(5), 296-313.
- Oyerogba, D., Ezekiel O.M. & Olaleye. M. (2014). Cost Management Practices and Firm's Performance of Manufacturing Organizations. *International Journal of Economics and Finance*, 6(6), 213 – 221.
- Panigrahi, A. K. (2013). Relationship between inventory management and profitability: An empirical analysis of Indian cement companies. *Asia Pacific Journal of Marketing and Management Review*, 2(7), 107 – 120.
- Prabir, B. Girish, J. & Pradeep, S. (2008). Analysis of Manufacturing Costs in Pharmaceutical Companies. *Journal of International Society for Pharmaceutical Engineering* 2(4), 133-141.
- Prempeh, K. B. (2015). The impact of efficient inventory management on profitability: Evidence from selected manufacturing firms in Ghana, *Munich Personal RePEc Archive MPRA*, 6(8), 1-6.
- Raheman, A. & Nasr, M. (2007). Working capital management and profitability – Case of Pakistan Firms, *International Review of Business Research Papers*, 3(19), 279 – 300.
- Ramitz U. R and Junrui Z. (2014). Firms' performance and emerging economics. *The Journal of Apple Business Research*, 30(3), 701-714.
- Rafael, B. P. & Rafaela, R. C. (2016). The multilevel effect of marketing activities on sales, revenue and profitability in a micro-enterprise, *Review of Business Management*, 12(9), 10 -14.
- Santos, C, Cerqueira, A & Brandão, E (2016). Audit fees, non-audit fees and corporate performance. Working Paper Presented to School of Economics and Management, University of Porto.
- Sekeroglu, G. & Altan, M. (2014). The relationship between inventory management and profitability: A comparative research on Turkish firms operated in weaving industry, eatables industry, wholesale and retail industry. *International Journal of Social. Behavioural, Economic, Business and Industrial Engineering*, 8(6), 698 – 703.
- Sitienei, G. & Memba, F. (2015). The effect of inventory management on profitability of cement manufacturing companies in Kenya: A case study of listed cement manufacturing companies in Kenya. *International Journal of Management and Commerce Innovations*, 3(2) 111 – 119.
- Stephen, P. Aliyu U. F & Ibrahim A. (2017). Impact of sales promotional strategies on organizational performance in Nigeria. *European Journal of Research and Reflection in Management Sciences* 2(5), 4 – 9.
- Syeda, N. Z., Rizvi, S. M, & Lahore, P. (2011). Impact of sales promotion on organizations' profitability and consumer's perception in Pakistan. *Interdisciplinary Journal of contemporary research in business*, 3(5), 123-142.
- Temeng, V. A., Eshun, P. A. & Essey, P. R. K. (2010). Application of inventory management principles to explosive products manufacturing and supply – A case study. *International Research Journal of Finance and Economics*, 38(16), 198 – 209.
- Victoire, M. (2015). Inventory management techniques and its contribution on better management of manufacturing companies in Rwanda Case study: Sulfo Rwanda Limited. *European Journal of Academic Essays*, 2(6), 49-58.

- Xu, J, Liu, F & Chen, Y (2019). Research and development, advertising and firms' financial performance in South Korea: Does Firm Size Matter? *MDPI Journal*, 5(3), 1-16.
- Yeboah, M. (2016). Impact of product branding on sales revenue of listed companies in Ghana. *International Journal of Academic Research in Business and Social Sciences*, 6(9), 22-50.
- Watkins, R (2007). Designing for performance, part 2: Selecting your performance technologies. *Journal Management and Accounting*, 4(5), 108-120.
- Wagenvoort R. (2003). Are finance constraints hindering the growth of SMEs in Europe? *EIB Paper*, No. 7, Economic and Financial Studies, European Investment Bank.