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INDIRECT COSTS AND PROFITABILITY OF SELECTED MANUFACTURING COMPANIES IN NIGERIA.

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Abstract

Indirect costs cannot be traced to any cost object and hence they can be subject to a lot of waste which can reduce the profitability of a manufacturing organization. Though cost is very essential for any business to thrive yet uncontrolled cost can hamper performance. This study examines the impact of indirect costs on firms' performance for selected manufacturing companies in Nigeria using data of 5 conglomerate manufacturing companies in the Food and Beverage sector of the economy quoted on the Nigerian Stock Exchange during the period of 2008 to 2017. Three hypotheses were tested using pooled ordinary least square regression (OLS) method. The study used secondary data extracted from audited annual accounts of the selected companies. Selling and Distribution cost, Administrative cost and finance cost were the independent variables while Profit Before Tax (PBT) was the dependent variable representing Profitability. The result indicates that a positive significant impact exists between indirect costs and profitability in the manufacturing companies. The R^2 implies that 69% of the total variation in profitability is accounted for by administrative cost, selling and distribution cost, financial cost and other variables in the stochastic term accounted for the remaining 31% of variations in profitability. It is therefore recommended that manufacturing companies should strengthen control procedure to eliminate waste and therefore selling and distribution cost and administrative cost. Management is also encouraged to sustain the cheaper source of financing to increase profitability.

Keywords: Administrative-cost, Finance-cost, Indirect-cost, Performance, Selling/Distribution-Cost.

1.0 Introduction

There is no business organization that can thrive without a specific objective and most time the most important objective is profit maximization. With a well-established agenda set by the organization, measuring the effectiveness or otherwise of the steps taken by the management can be very easy. The most paramount purpose of any business entity is to maximize profit (Lucey, 1993) and other secondary objectives include survival, expansion, employee motivation, corporate social responsibility and so on. The two objectives are considered very important as stated above, but profit maximization is usually more critical as it protects the investors' interest which is the ultimate (Oyerogba, Olaleye and Solomon, 2014). Therefore, as a result of the competitive nature of business environment, profit maximization faces great limitation. So, for a company to meet its profit target, there is a need for adequate cost control policy. A company with adequate cost control policy on its indirect costs is more likely to attain its profit target (Robert,2007). Cost control and cost reduction are both necessary in ensuring that the indirect costs do not hamper the attainment of the organization's objectives. Adeniji (2014) posited that cost can be classified according to behavior, functions, nature, responsibility centers, degree of control and so on. This classification will enable the management to identify the cost which can be controlled or reduced with managers expertise and experience. Managers are unable to reduce uncontrollable costs such as head office costs and as such they can't be held responsible. Cost control perhaps is the most important in today's unstable economic environment due to the competitive nature of the business environment. Cost control is germane to the survival of manufacturing companies so as to ensure adequate utilization of the material resources and ultimately enhance the growth of profit. The importance of reducing the indirect costs cannot be underestimated by a manufacturing company as strategic edge to stay ahead of competition. Moreover, one of the most important traits for business success in a developing economy like Nigeria. Furthermore, indirect costs need the conscious effort by the management in negotiating with suppliers of services to the organization. This will enable the management to diligently implement budget with minimal deviation. One of the most critical problems of manufacturing companies in Nigeria is the growth of indirect cost which is inimical to the profit maximization objective. Most companies have shut down their operations as a result of escalating operations cost. On the other hand, the insatiable demand for higher quality by the customers at the lowest price possible is a pointer to the need for cost leadership. The shareholders also expect higher returns from their investment. It is critical challenge for manufacturing companies to cope with twin challenge of delivering products of higher quality at a low cost to customers and also

deliver superior returns to shareholders. Therefore, the objective of this study is to examine the effect of indirect costs on profitability of selected manufacturing companies in Nigeria with following hypotheses proposed for testing:

H1 : Selling and distribution cost has no significant effect on the profitability of companies.
H_2 : Administrative expenses has no significant effect on the profitability of companies.
H_3 : Finance cost has no significant effect on the profitability of companies.

2.0 Literature Review

Cost is the amount of resources expended or sacrificed to acquire specific goods or services and it can also be defined as the monetary value of expenditure incurred to acquire anything. Drury (2005) also described cost as expenses incurred in running a business so as to generate revenue to meet all the business obligations. In business, cost is simply narrowed down to the monetary valuation of materials, labor, risk incurred and time spent in producing goods or services. Horngren, Datar, Foster, Rajan and Ittner (2009) classified cost into fixed or variable components. Fixed cost remains unchanged in relation to given level of output while variable cost is directly related to the level of activity. Cost can also be classified into direct and indirect component. Direct costs are the expenses incurred to acquire inputs such as material, labour and variable overheads while indirect costs are selling and distribution cost, administrative cost, finance cost, consultancy costs and so on. To a large extent, direct cost can be easily controlled but most manufacturing companies have problems controlling the indirect costs. Cost reduction is defined as a phenomenon established to ensure efficiency of the overall cost of the organization (Asaolu & Nassar, 2007). It is a kind of reduction that is of a permanent nature.it directly influences the unit cost of manufactured products without impairing the intended quality. Lucey (1996) defined cost reduction as a concept of creating favorable standard cost while retaining the value of products. It systematically improves profit margin by removing various kinds of waste and eliminable expenses without jeopardizing revenue generation. It is also known as profit improvement or cost efficiency. Horngren (2006) defined a controllable cost as any type of cost that is majorly subject to the initiatives and capacity of a responsibility manager at a particular point in time. The allocation of costs to products is inimical for cost control purpose, since several departments are involved in the manufacture of a product and each department has its own manager. The product cost will be difficult to trace to area of manager's responsibility. Zengin and Ada (2010) in attempt solve this problem, suggested that costs and revenue must be traced to the managers who are responsible for both and this is known as responsibility accounting. Drury (2005) defined cost centre a place where managers are accountable for the expenses incurred in the department or unit under their control, profit centre is where managers are responsible for sales revenue and expenses and investment center is where managers are accountable for sales, revenue and expenses.
According to the economists profits may mean the actual increase in the wealth of business that is cash flows plus change in the value of the firm's assets. This definition includes the initial depreciation and therefore implies the discount value. The accounting definition of profits is based on the accrual principle which recognizes transaction when it takes place not necessarily when cash is paid or received. The accountant charges depreciation, which is a non-cash item to compute accounting profits. This is the operating cash flow or cash profit can be found out by adding depreciation to the accounting profit (Pandey 1995). It is proper that they assume profits when the cost of sales is less than the revenue of the organization. The mathematical relationship is given as total revenue to total costs. So, there is a dispute between the accounting profit and the actual cash flow. Hence a profitable business might suffer liquidity problems. There are different categories of profit such as net profit also referred to as profit after tax (PAT) and it is the difference between profit before tax and the tax rate.

Selling and distribution expenses on the other hand, are those expenses incurred for the promotion of sales of goods and rendering of services to different categories of customers. It also includes the expenses incurred for the warehousing and storage of goods and packing goods for safe delivery to the customers. Thus, selling expenses include sales managers' salaries, salesmen omission, advertisement cost, point of sale materials, showrooms expenses, after-sale service, warehousing cost, delivery cost and so on. Administrative expenses is included in the the operating expenses of a business entity and it is incurred for smooth running of the the general administration of the business. Examples include the salaries and allowances of staff at the top, middle and the lowest level of the organisation.IAS 23, defines finance costs as interest and other costs that an entity incurs in connection with the borrowing of funds. Finance costs also known as borrowing costs are the compensation paid to the owners of capital in exchange for the risk taken. Companies finance their operations either through equity or debt with cost attached to each. The equity holders are desirous of dividends and capital gains while debt providers focus prompt interest payments.

3.0 *Kaizen Costing System*

The term Kaizen originated from Japan and launched by Masaki Imai (Sani and Allahverdizadeh, and Rof, 2011). The concept contains of two words "kai" which stands for change and "zen" which means better (Rof, 2011). Manufacturing companies are expected to improve their operations continuously to keep the cost of operations low. The key focus of the principle of Kaizen Costing is the introduction of small improvement that will be sustainable in the production process thereby leading to cost minimization cost. Ellram (2000), cited in Modarress, Ansari, & Lockwod, 2004) identified that Kaizen Costing ensures that products meet or exceed customer expectations for quality, functionality, and prices in order to sustain the product's competitiveness. This according to Rof (2011) can be achieved through a strategic elimination of all the wastages in the production process that will not add any value. Ogundele (2004) identified that this technique has made tremendous changes in management policies not only in Japan, but all over the world. Unlike target costing that is applied during the designing stage, Kaizen costing is applied during the production stage of the product life cycle.

4.0 Empirical Review

Lawal (2017) investigated the effect of cost control and cost reduction of cost control techniques in organizational performance. Primary data were gathered usinsample size of 50 respondents from Chemster Paints Industry in Nigeria. The independent variable is cost control and cost reduction while the organization's performances the dependent variable. The study shows that cost control and organizational management style has a positive impact on organizational performance.

In a survey conducted by Lasisi and Nuhu (2015) to investigate the influence of cost control on the survival of firms in Nigeria. Structured questionnaires were administered to 30 staff of Nigerian Bottling Company Plc (Jos Plant) at random. The finding shows that 70% of the respondents strongly agreed that cost control impacts profitability of firms, 13.3% were undecided and 16.7% disagreed. The study recommends that cost control mechanisms such as Just – in – Time (JIT) techniques should be employed to meet production and sales requirement in Nigeria Bottling Company Plc.

Oyerogba, Olaleye and Solomon (2014) examined the relationship between cost management practices and performance of firms in Nigeria. The data was sourced from audited reports and accounts of 40 manufacturing companies listed on Nigeria stock exchange for the period of 10years ranging from 2003 to 2012. Four hypotheses were formulated and tested for the study. The proxy for independent variables were direct material cost, direct labour cost, production overhead cost and administrative overhead while operating profit was taken as dependent variable representing the firm's performance. The finding indicates that a positive significant relationship exists between cost management practices listed above and firm's performance. The study recommended that a cost reduction strategy should focus on production overhead cost and administrative overhead cost so as to achieve profit maximization and wealth creation objective.

5.0 Methodology

Data were sourced from audited financial reports of 5 manufacturing companies from 2008-2017. There are about 180 companies listed on the floor of the Nigerian Stock Exchange (NSE) with sectors ranging from Agriculture, Airline, Automobile and Tyre, Banking, Breweries, Building Materials, Chemical and Paints, Commercial Services and Construction. Food, Beverages and Tobacco, Real Estate and so on. For the purpose of this study, 5 Companies were selected in Food, Beverages and Tobacco sector and they are Cadbury Nigeria Plc, Guinness Nigeria Plc, Nestle Food Nigeria Plc, Flour Mills Nigeria Plc and Nigerian Breweries Plc. The reason for the choice of these Companies is that they produce household products that are being consumed by many Nigerians and cost control is very important to the pricing of these products. Data were analysed using Ordinary Least Square (OLS) regression technique to establish the effect of indirect cost on profitability. The model developed for this study is stated below:

$$Y = \beta 0 + \beta 1Xi + \beta 2Xii + \beta 3Xiii + \mu$$

Where;
Y = Profit Before Tax;
Xi = Selling and Distribution Cost;
Xii = Administrative Cost;
Xiii = Finance Cost.

In the model, $\beta 0$ = the constant term while the coefficient βi= i-iii were used to measure the sensitivity of dependent variable (Y) to unit change in the predictor variables. μ is the error term which captures the unexplained variations in the model.

Table 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.

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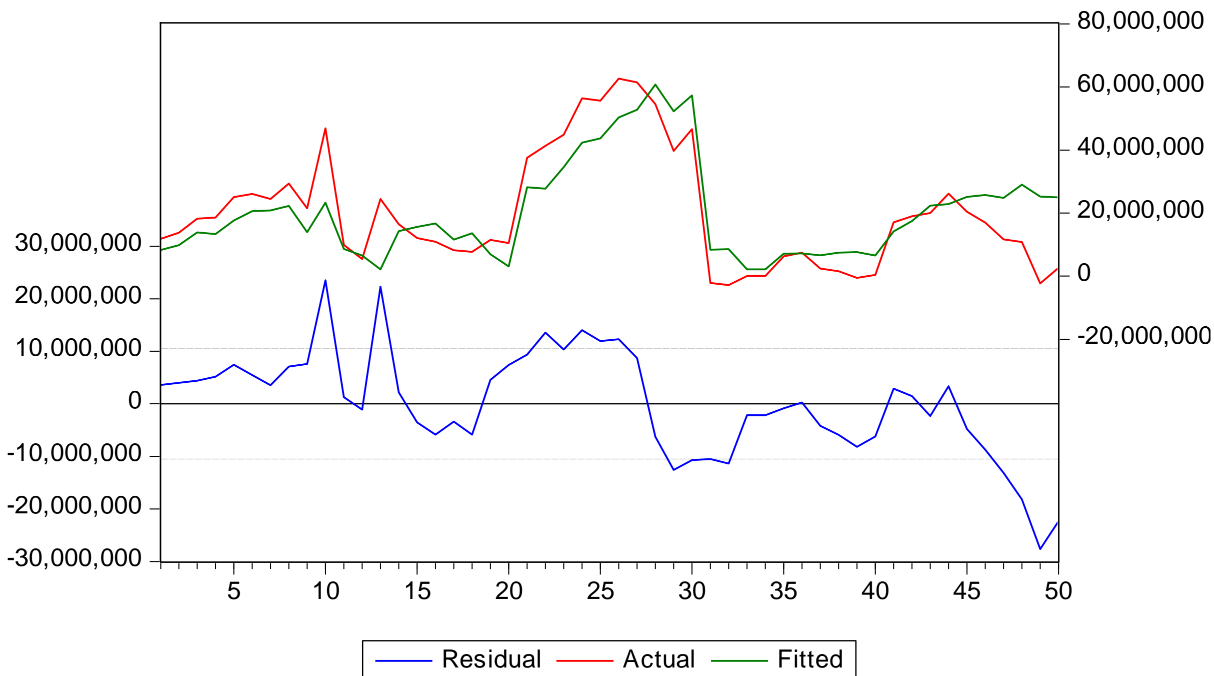
C	2142523.	2528272.	0.847426	0.4011
ADMIN_COST	1.058169	0.300749	3.518442	0.0010
FIN_COST	-0.667068	0.257570	-2.589847	0.0128
S_D_COST	0.587411	0.135598	4.332011	0.0001

R-squared	0.690924	Mean dependent var	20166192
Adjusted R-squared	0.670767	S.D. dependent var	18279221
S.E. of regression	10488410	Akaike info criterion	35.24606
Sum squared resid	5.06E+15	Schwarz criterion	35.39902
Log likelihood	-877.1515	Hannan-Quinn criter.	35.30431
F-statistic	34.27686	Durbin-Watson stat	0.538143
Prob(F-statistic)	0.000000		



The model obtained is given as:

$$PBT = 2142523 + 1.058169AC - 0.667068FC + 0.587411S\&D$$

$$Tcal = (0.847426) \quad (3.518442) \quad (-2.589847) \quad (4.332011)$$

$$p - value = (0.4011) \quad (0.0010) \quad (0.0128) \quad (0.0001)$$

The above model proved a goodness of fit test as the F-statistics obtained and the corresponding p-value (34.27686, 0.000000), show that the variables in the model is significant at the 5% critical level. The R-squared result from Table 1 above reveals that 69% (represented by 0.690924) of the total variation in profitability is accounted for by administrative cost, selling and distribution cost, financial cost and other variables in the stochastic term accounted for the remaining 31% of variations in profitability. The adjusted R-squared valued at 0.670767 implies that even if other variables accounted for in the stochastic parameter were included in the model, administrative cost, financial cost and selling and distribution cost would still account for 67% of the variations in profitability. The

coefficient of selling and distribution cost obtained as (0.587411) and corresponding p-value of 0.0010 indicates that selling and distribution cost is statistically significant at 5% level of significant and correctly signed. This implies that selling and distribution cost impacts profitability of manufacturing companies in Nigeria. The coefficient of administrative cost obtained as (1.058169) and corresponding p-value of 0.0128 indicates that administrative cost is statistically significant at 5% level of significance and correctly signed. This implies that administrative cost impacts profitability of manufacturing companies in Nigeria. The coefficient of financial cost obtained as (−0.667068) and corresponding p-value of 0.0001 indicates that finance cost is statistically significant at 5% level of significance and incorrectly signed. This implies that finance cost has negative impact on profitability of manufacturing companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The results revealed that input cost had significant effect on manufacturing firms' performance in Nigeria. This implies that robust cost control policy and its implementation is very critical to the improved performance Therefore, manufacturing companies in Nigeria should pay particular attention to the selling and distribution expenses, administrative expenses and finance cost. Based on the findings, this study recommends that manufacturing companies should strengthen and adhere strictly to the cost control policy of the organization. Management of manufacturing companies should put in place cost control procedure to safeguard effective budget implementation. Selling and distribution expenses should be monitored because of its significant impact on companies' profitability. Manufacturing companies should explore alternative sources of cheaper financing in order to reduce finance cost which have significant impact on profitability.

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