Budgeting Processes and the Performance of Food and Beverages Manufacturing Companies in Nigeria

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ABSTRACT

This study focuses on the determination of the relationship between budgeting processes which are measured by; planning, communication, implementation, participation, control and organizational performance which are predicted by dividend per share, earnings per share, net asset per share and return on investment of food and beverages manufacturing companies as well as ascertaining the effect of budgeting processes on the performance of the industry. Data were collected through the survey of 99 managers comprising top level and middle level managers of five different food and beverages manufacturing companies randomly selected from Lagos State, Nigeria. Pearson Product Moment Correlation Coefficient was used to determine the level of association between budgeting processes and organizational performance and it was discovered that there was a significant relationship between planning, communication, implementation, control and performance indicators whereas there was no significant relationship between participation and performance indicators. Multiple regression analysis was used to determine the effect of budgeting processes on the performance of the industry. The results of regression analysis show that budgeting processes has a significant effect on dividend per share and net asset per share and no significant effect on earnings per share and return on investment. F-test and P-value were used to test the significance at $\alpha = 0.05$. It is however recommended that, food and beverages manufacturing companies in Nigeria should intensify efforts in following budgeting processes as it improves performance of food and beverages manufacturing companies in Nigeria in terms of shareholders wealth and put in place budget manual for monitoring and control of the process.

Keywords: *Budgeting, food, beverages, manufacturing companies, investment*

INTRODUCTION

Budgeting is an important concept in finance that cannot be over emphasized. Today, uncertainties are prevalent in Nigeria business environment so much that most of the products which are categorized as consumer goods are not in the market all through the year and if they are found, at varied prices. According to equity research report (2009), the consumer goods sector is a major part of the manufacturing sector in Nigeria but what we see in Nigeria are processors who process imported raw materials into finished products, with very little value added. Multinational companies operating in this industry import concentrates from their parent companies, which they convert into finished products with minimal value added. The manufacturing sector in Nigeria faces many challenges caused by the environment in Nigeria such as poor infrastructure, poor standards of education, and high levels of corruption and a generally low level of disposable income of the population. In Nigeria today, there are few manufacturing companies, many manufacturing companies that are supposed to be in existence have collapsed due to such factors as poor management, unfriendly government policies, and total neglect by both the government and the private owners. There are more merchandising companies than manufacturing companies. The reason is that Nigeria depends too much on importation of finished goods. Even the few manufacturing companies in existence import raw materials and component parts used in producing their final products, due to fluctuations in exchange rates; prices of both locally produced and imported goods are not stable (Equity Research Report on Nestle, 2009). With the prevalent business environment in Nigeria, Managers and Stakeholders of manufacturing companies must be prepared to compete favorably and in order to survive they need modern skills like budgeting processes in its entirety to forecast the major changes which are likely to affect the business while they plan future directions and dimension of resources needed to attain selected goals. The minute contribution of manufacturing companies to the economy is not unconnected with the inability of many organizations including food and beverages manufacturing companies to adequately plan and control their finances. Notable players include Cadbury Nigeria Plc, Nestlé Nigeria Plc, UAC Foods, WAMCO Nigeria Plc (Equity Research Report on Nestle, 2009).

The term budget refers to a plan, quantified in monetary terms, prepared and approved by appropriate authorities prior to the defined period of time usually showing planned income to be generated and/ or expenditure to be incurred during that period and the capital to be employed to attain a given objective (Orebiyi and Ugochukwu, 2006). On the other hand, Performance can be defined as the outcome of a firm's activities over a given period. Thus, a firm could experience a poor as well as a good performance. The determinant or measure of performance varies across industries and companies. Measurement of performance includes: customer satisfaction, employees and/or shareholders satisfaction, sales growth, market share, return on capital invested (Amalokwu and Ngoasong, 2008). In this work, the performance indicators are: Dividend per Share, Earnings per share, Net Asset per share, and returns on investment. The inability of many organizations to adequately plan has led to various problems they are facing today. Some of these problems are low profitability, poor liquidity which of course would have negative effect on shareholders wealth. It is as a result of this, that this study is based on budgeting and firms performance of selected food and beverages companies in Nigeria.

Yucel and Gunluk (2007) in their research on effect of budgetary control and justice perception on the relationship between budgetary participation and performance discovered that budgetary control and justice perception affected performance positively. In addition, performance was affected negatively in an environment where rigid budgetary control was practiced. Managers consider budget participation more effective in an environment where justice perception is higher than where the justice perception is low (Yucel and Gunluk, 2007). Parker and Kyj (2006) claim that budgetary participation affects vertical information sharing, organizational commitment, role ambiguity and performance directly and indirectly. Akintoye (2008) in his work on budgetary control and its effect on firms' performance, tested the association using turnover as one of the variables with the assumption of turnover as the budgetary control indicator and Dividend per share, Earning per share and Net asset per Share as the indicators for firms' performance. They discover that there is a significant relationship between the two categories of variables mentioned above. Wijewardena and De Zoysa (2001) argue that the impact of budget planning and budgetary control on performance may vary from firm to firm depending on the extent of its use. They assert that the greater extent of the formal budgeting process should have a positive impact on the performance of SMEs. In their study, performance is measured by two financial indicators: sales growth and returns on investment. Data were collected from 2,000 manufacturing SMEs in Australia. The results show a positive and significant relationship between budgeting planning and sales growth, and between budgetary control and sales growth. However, no significant relationship is found between budgeting planning and return on investment, nor between budgetary control and return on investment.

As a result of Wijewardena and De Zoysa's research, Fonseka and Perera (2004) also studied the relationship between the budgeting process and performance in Sri Lanka's SMEs. The findings are consistent with the previous findings, which show that those firms engaged in more formal budgeting planning and control processes have achieved higher growth rate in sales, but no significant relationships are found between budgeting planning and returns on investment, nor between budgetary control and returns on investment. In the contribution of Otusanya (2004) to communication aspect of budget processes, in addition to being the managers' planning tool, he asserts that budgeting is also one of the most effective tools of communication and integration. Budget communication shows how each part of the organization relates to its goal. Budgeting therefore requires that the manager in charge of the whole and each person in charge of parts discuss the budget jointly in order to arrive at a better result.

Amoako-Gyampah and Acquaah (2008) classify performance under two dimensions: market share and sales growth. Where market share is the firm's portion in the entire industry and sales growth is the increase in sales in money value. High performance will mean high market share and high sales growth. Hake and Krishnan (2005) examine the firms' performance by the interaction of budget type and environment uncertainty, they found that when the environment is highly uncertain, relative to traditional budget, rolling budget can help in coping with the uncertainty and improve the performance. In the same vein, in this research, where there is existence of dividend per share year after year, increase in earning per share and net asset per share, there is firms' performance. They further said that a strategy that allows a firm to achieve either: high design and conformance quality or improvements in production efficiencies will lead to either: a higher reputation in the market place, cost reduction, and higher productivity or low-pricing possibility which could be translated into higher sales growth and increased market share. This study seeks to investigate the relationship between budgeting processes and the performance of food and beverages manufacturing companies in terms of shareholders' wealth in Nigeria using primary data. It also tests the effect of budgeting processes on firms' performance in Nigeria with performance indicators being dividend per share, earnings per share and net asset per share. Hence, the following hypothesis will be tested to substantiate the claims of the study.

$H_0 1$ There is no significant relationship between budgeting processes and organizational performances of the selected food and beverages manufacturing companies in Nigeria.

$H_0 2$ Budgeting processes has no significant effect on the performance of food and beverages manufacturing companies in Nigeria.

METHOD

The research design that was adopted for this study is survey. The study was carried out with the use of a well structured and pre-tested questionnaire to gather information. One hundred copies of questionnaire were distributed to top level managers and middle level managers of five food and beverages manufacturing companies were randomly selected in Lagos State, Nigeria. Out of the 100 copies of questionnaire administered, 99 copies were correctly filled and returned. Correlation analysis using Pearson Moment Correlation Coefficient (PMCC) was conducted to find the relationship between budgeting processes (planning, participation, Communication, implementation and control) and organizational performance in term of shareholders wealth (DPS, EPS, ROI and NAS). The effect of budgeting processes on organizational performance in terms of shareholders' wealth was discovered using multiple linear regression models. To test for the validity of the questionnaire, there was a pre-test administration of the instrument to ascertain the level which it will be understood by the respondents. To test for reliability, the instrument was administered to a similar group to ensure reliability; test-retest was applied by administering it twice to the same respondents selected outside the sample of the study under identical conditions. The Cronbach's alpha coefficient was used to test the reliability of the instrument. Reichheld (2003) as cited in Asikhia (2007) admonishes that a Cronbach value of 0.60 is sufficient for a research of this nature. The following is the result of the test.

Reliability Statistics

Cronbach's Alpha	N of Items
.826	15

Field Survey, (2012)

The general equation for regression is given as Y=f(X) which means Y depends on X and the equation can be written as: $Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \mu$

Where, α is the intercept, $\beta_1, \beta_2, \beta_3, \beta_4$ *and* β_5 are the coefficients of variables X_1, X_2, X_3, X_4 and X_5 respectively, which show the kind of relationship between dependent and independent variables and μ is known as the error term, in a random (stochastic) variable that has well defined probabilistic properties (Gujarati and Porter, 2009).

Y = Dependent Variable
= Firm Performance which are indicated by; DPS, EPS, ROI and NAS

X = independent Variable
= Budgeting processes indicated by; Planning, Participation, Communication, Implementation and Control

For this study however, the formula above is adapted as follows;

Model: $Firm\ Performance = f(Budgeting\ processes)$

Therefore, $FP = \alpha + \beta_1 Pl + \beta_2 part + \beta_3 comm + \beta_4 impl + \beta_5 control + \mu$

Hence, $DSP = \alpha + \beta_1 Pl + \beta_2 part + \beta_3 comm + \beta_4 impl + \beta_5 control + \mu$

$EPS = \alpha + \beta_1 Pl + \beta_2 part + \beta_3 comm + \beta_4 impl + \beta_5 control + \mu$

$ROI = \alpha + \beta_1 Pl + \beta_2 part + \beta_3 comm + \beta_4 impl + \beta_5 control + \mu$

$NAS = \alpha + \beta_1 Pl + \beta_2 part + \beta_3 comm + \beta_4 impl + \beta_5 control + \mu$

As assigned by economic theory, the theoretical *a priori* expectation is as shown below. $\frac{\Delta Perf}{\Delta BP} > 0, where\ \frac{\Delta Perf}{\Delta BP} = \beta_i$

RESULTS AND DISCUSSION

Table 1: Correlation between Budgeting Processes and Organizational Performance

	Planning	Participation	Communication	Implementation	Control
DPS	0.206			0.275	0.350
EPS		0.246			0.201
ROI		0.270			
NAS	0.224			0.363	0.378

Source: Field survey, 2012

Table 1 shows that the correlation between budget planning and dividend per share is significant though weak at $\alpha = 0.05$ level of significance which is 0.206 and it is expressed in percentage as 20.6%. The level of association/relationship between planning and net asset per share is 22.4% which is relatively low but significant at $\alpha = 0.05$. Participation has no significant correlation with any of the predictors of the performance of food and beverages manufacturing companies in terms of shareholders wealth. This can be explained by the fact that the relationship between budget participation and performance is indirect and this does not mean that there is no relationship but it is not significant. However, there is a significant correlation between communication and earnings per share as well as return on investment which are 0.246 and 0.270 respectively. Implementation has a significant relationship with dividend per share which is 0.275 and it has a significant relationship with net asset per share. There is a significant correlation between budgeting control and dividend per share, earning per share and net asset per share.

The null hypothesis that there is no significant relationship between budgeting processes and organizational performances of the selected food and beverages manufacturing companies in Nigeria was rejected since the calculated t-value was 1.68 which is less than the table value of 5.004. Hence, there is a significant linear relationship between budgeting processes and the performance of food and beverages manufacturing companies in Nigeria in term of shareholders wealth.

Regression Analysis between Dividend per Share and Budgeting Processes: From the regression analysis result, we have the following:

The model $DPS = \alpha + \beta_1 Pl + \beta_2 impl + \beta_3 control + \beta_4 \, comm + \mu$

Becomes:$DPS = 2.215 + 0.242Pl + 0.099impl + 0.317control - 0.213 \, comm$

$R^2 = 0.170$ F-test = 4.801 p- value is 0.001[a].

Since the p-value is less than α, the null hypothesis that budgeting processes has no significant effect on the performance of food and beverages manufacturing companies in Nigeria was rejected. This implies that budgeting processes has a significant effect on Dividend per share of food and beverages manufacturing companies in Nigeria.

Regression Analysis between Earnings per Share and Budgeting Processes: From the results of regression analysis in appendix 3, we have the following:

The model: $EPS = \alpha + \beta_1 Pl + \beta_3 impl + \beta_3 control + \beta_4 comm + \mu$

Becomes:

$$EPS = 1.963 + 0.052Pl + 0.027impl + 0.167control + 0.229comm$$

$R^2 = 0.091$ F-test = 2.351 p- value = 0.108[a]

The null hypothesis is accepted and concludes that budgeting processes has no significant effect on Earnings per share of food and beverages manufacturing companies in Nigeria. $R^2 = 0.091$, this means that 9.1% of the variation in Earnings per share of food and beverages manufacturing companies in Nigeria can be explained by the variation in budgeting processes.

Regression Analysis between Return on Investment and budgeting Processes: The following are the results of regression analysis from Appendix 4.

Therefore, model 3 which is stated as follows become:

$$ROI = \alpha + \beta_1 Pl + \beta_3 impl + \beta_3 control + \beta_4 comm + \mu$$

Becomes;

$$ROI = 2.433 + 0.001Pl + 0.190impl - 0.098control + 0.274comm$$

$R^2 = 0.087$ F-test = 2.244 p- value = 0.07

The null hypothsis that budgeting processes has no significant effect on Returns on Investment of food and beverages manufacturing companies in Nigeria was accepted. $R^2 = 0.087$, this means that 8.7% of the variation in Returns on investment of food and beverages manufacturing companies in Nigeria can be explained by the variation in budgeting processes.

Regression Analysis between Net Asset per Share and budgeting Processes

$$NAS = 2.143 + 0.176Pl + 0.200impl + 0.212control - 0.145\ comm$$

$R^2 = 0.194$ F-cal is 5.655 P value = 0.000[a]

$R^2 = 0.194$, this means that 19.4% of the variation in Net Asset per share of food and beverage manufacturing companies in Nigeria can be explained by the variation in budgeting processes. The null hypothesis that budgeting processes has no significant effect on Net Asset per share of food and beverages manufacturing companies in Nigeria was rejected. We however conclude that budgeting processes has a significant effect on Net Asset per Share of food and beverages manufacturing companies in Nigeria. Using correlation analysis, the correlation results show that there is a positive linear relationship between planning and dividend per share and Net Asset per Share of food and beverages manufacturing companies in Nigeria, There is no significant relationship between participation and all the predictors of organizational performance of food and beverages manufacturing companies in Nigeria. Communication has a positive linear relationship with Earnings per Share and Return on investment. Implementation of budget has a positive significant relationship with Dividend per share and Net asset per Share of these companies. Budgeting control has a positive linear relationship with Dividend per share, Earnings per share and Net asset per Share of food and beverages manufacturing companies in Nigeria. This result aligns with that of Wijewardena and De Zoysa (2001) when a similar research was conducted in Australia.

The result of this work is not so different from that of Akintoye (2008), though he used turnover as indicator of budgetary control. This means that budget is very important in boosting the performance of manufacturing companies. Multiple linear regression analysis results show that budgeting processes in form of planning, communication, implementation and control has a significant effect on Dividend per share and Net Asset per Share of food and beverages manufacturing companies in Nigeria in terms of shareholders wealth using; F- test, P-Value and standard error test. It has no significant effect on Returns on investment and Earnings per share of food and beverages manufacturing companies in Nigeria using the same tests of significance. Planning, Communication, Implementation and Budgetary control have significant relationship with organizational performance in terms of shareholders wealth of food and beverages manufacturing companies in Nigeria, surprisingly, participation has a relationship but not a significant one with the performance of the industry. Budgeting processes have significant effect on the dividend per share and Net asset per share of food and beverages manufacturing companies in Nigeria, but no significant effect on Earnings per share and Return on Investment. Communication has an inverse relationship with dividend per share and net asset per share of food and beverages manufacturing companies in Nigeria. There is need for the Managers and Administrators of Food and beverages manufacturing companies in Nigeria to intensify effort in following the budgetary system as we have it in literature because this study shows that it exacts financial discipline on management members and helps to compare actual with budgeted sales and production the response to the questionnaire shows the awareness of budgetary system by Managers of food and beverages manufacturing companies but for budget manual which the report shows that is not in place in most of the companies. This study reveals that budget implementation in food and beverages manufacturing companies in Nigeria is being hindered by government policies like removal of fuel subsidy which met the Managers unprepared on January 1st, 2012, poor infrastructure such as epileptic power supply and lack of good roads, personality of management members, inflationary trend and so on.

CONCLUSION AND RECOMMENDATIONS

This study is based on the budgeting processes for improved performances of food and beverages companies in Nigeria. The predictors used for budgeting processes in this work were: planning, participation, implementation, communication and control. The indicators of firm performances used were: Dividend per share, Earning per share, Net Asset per share and Returns on Investment. Based on the findings, the food and beverages manufacturing companies in Nigeria are not practising incremental budgeting. Budget implementation in food and beverages manufacturing companies in Nigeria are affected by the infrastructural degradation in the country. For example; poor roads have been found to hamper distribution of goods in these companies and inconsistent power supply has adversely affected their operations. Some of the problems can also be blamed on the government - both State and Federal, because they make policies which are unfavourable to the companies. The intervention of government in these companies does more harm than good based on the responses of respondents to question 41 on the questionnaire. Conclusively, there is linear relationship between budgetary processes in form of planning, communication, implementation, control and the performances of food and beverages manufacturing companies in Nigeria in terms of shareholders wealth. There is no relationship between budgeting participation and performance of food and beverages manufacturing companies in Nigeria in terms of shareholders wealth. This is explained for by the fact that only few management members take decisions regarding shareholders wealth.

Considering the aforementioned findings of this research, it is recommended that; the Nigerian Government should encourage food and beverages manufacturing companies to implement their budgets as planned because the research showed that, the meddling does more harm than good to the companies and the policies such as LASMA rules and removal of fuel subsidy should be structured to accommodate the distribution of goods without any delay. It is also recommended that management members should pay more attention to budgeting processes since its improvement will bring about a tremendous increase in the performance of the sector. Attention should be given to the aspect of participation as it has no relationship with performance indicators which is at variance with literature, control and comparison of variances in each of the companies should not be neglected. This research reveals that the components of budgetary system matter to implementation and communication of budget. There is need for each company to have budget manual and to promote its use since most of the companies have no permanent management members so that the new management members will have basis for their work which they can always refer to as a guide. The management members should ensure that stakeholders are carried along when decisions about shareholders wealth are taken. It is suggested that further studies can be carried out to know why the Food and Beverages Manufacturing Companies in Nigeria, have no regard for the use of budget manual and why manager's participation is being overlooked. The research shows that, food and beverages manufacturing companies in Nigeria do not follow incremental budget as well as zero-based budgeting, hence the need to investigate the type of budgeting they use.

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