Budgetary Control and Organizational Survival: Evidence from Manufacturing Firms in Nigeria

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Abstract: This paper was set out to investigate the functional rapport amid budgetary controls and organizational survival of manufacturing companies in Nigeria. The major problem that motivated this study is incessant collapse of manufacturing companies as a result of lack of proper budget preparation and embracing of budgetary control measures to enhance their profitability. The study adopted the Ex-Post-facto research design it covered listed manufacturing companies in Nigeria for a period of five years 2015-2019. The independent variables were decomposed into a change in operating costs, sales growth and change in operating profit, while the dependent variable was organizational survival proxied by the age of the company. Data were got from the yearly accounts of the selected companies and analysed using descriptive statistics and regression. The result suggests that budgetary control is not a significant determinant of survival of manufacturing companies in Nigeria. This implication of this finding is that manufacturing companies in Nigeria are not fully embracing budget and budgetary controls or that they prepare and not implement it fully. Thus, the study recommends that the management of manufacturing companies should as matters of urgency employ budgetary controls that assist them greatly in controlling changes in the operating costs.

Keywords: Budgetary control, Budget discipline, Organizational survival, Manufacturing companies, Nigeria

1. Introduction

Corporate failure has become a subject of global debate and focus has been on management inability to engage effective budgeting and budgetary controls (Madugba, Ben-caleb, Lawal, and Agburuga, 2020). Business organizations are established with the concept of ‘going-concern’ in mind. But profitability, survivability and sustainability of any business entity, is a function of effective planning, control and decision making. Budgeting permeates both the planning and controlling functions of management. It implies predefining an action and comparing the actual outcome with the standard for effective resource management (Nweze, 2004). The issue of budgeting cannot be overlooked in business if the major objective is survival and continuity as captured in Luke, 14:28-32 where Jesus explained of planning for a venture before taking it up. Genesis 1:1-31 God planned before initiating creation.

The existence of every organization is controlled by many components including how the organizations plan their resources and how they intend to utilize their resources (Robyn, Peter, and Sandra, 2010, Aduwo, 2019). Following the predicament surrounding winning in today’s business environment in Nigeria, managers and shareholders need to be confident and willing to compete positively under conditions that are rapidly shifting. To survive under these environmental complexities, skilled managers and shareholders from both the private and public (open) sectors need an
efficient management method to predict the major changes that are likely to affect the business while choosing the future direction and resource dimension needed to achieve selected goals (Nweze, 2004).

Successful administration is not just a talent, cleverness and willpower; but a mindful struggle to manage existing resources to achieve business goals (Pandy, 1985). Hence, budgeting is an effective tool for preparation, control and productivity enhancement. Budgeting and budgetary controls are crucial management techniques that must be engaged to achieve a good level of success in business.

One of the great budgeting values is that it requires managers to give top priority to planning among their duties. It also provides a means throughout an entire organization to communicate these plans in an orderly manner. However, there is a great demand for managers to enhance the impact on budgetary control in the manufacturing sector to ensure a high level of organizational survival. The study aims to address budgetary control and organizational survival in Nigeria’s manufacturing sectors.

However, despite the numerous merits attributable to budget and budgetary controls, it has been observed that many organizations do not prepare a good budget and that budgetary control measures have been flawed in such firms which have manifested either in low performance or wind-up of such business which goes to portray the saying that it does not take a good budget to succeed but a conscious resource control effort (Madugba, et al, 2020).

Besides, weakness in a budget analysis which firms consider as an individual factor rather than systematic deficiencies is a major contributor to misdirection of effort and has led to budget frustration instead of attainment. More so, non-engagement of the lower level workforce in budget preparation as a result of their little or no knowledge of budget and its importance also impedes organizational survival (Nweze, 2004).

Again, underestimation and or overestimation of cost by managers for the fear of being blamed when objectives are not achieved are also a hindrance to organizational survival. Often in organizations, managers do this to save their heads and jobs, thereby exposing their firms to a persistent and chronic hazard.

It is based on the gaps identified above that this study is fashioned to examine the budgetary control and organizational survival with its scope on manufacturing companies in Nigeria. The specific objective is to investigate the relationship between change in operating cost, change in profit and sales growth on the age of manufacturing firms in Nigeria.

2. Literature Review

The term budget is used in a wider sense to describe financial estimated income and expenditure of an organization for a defined period of time usually one year. Put differently, it is a financial plan showing the expected income and expenditure of a business for a year. While budgetary control implies the act of handling income and expenditure. Put differently, it is regular comparison of actual income or expenditure with estimated income or expenditure to really identify whether or not corrective actions is required. From the above definition, it is correct to say that budgetary control involves supervision of estimated financial plans and pointing out deviations from such plans and effecting corrections where ever needed. The types of annual government budgets are surplus, deficit and balance budgets. For business organizations. The major budgetary control methods are financial budget, operating budget, and non-monetary budget.

Contingency-based research suggests that all businesses and organizations do not have a single budgeting approach. Rather, it is argued that the suitability of a particular approach depends on an organization’s characteristics; its dimension, approach, customs, and the setting in which it operates to most excellent tie the core budgeting functions (Robyn, Peter, and Wallace 2010). Contingency theory is part of behavioural theory that alludes that there is no finest technique to systematize or formulate decisions about a business and that an managerial technique that is effectual in several situations may not be unbeaten in others (Robyn, et al, 2010).

Activity-based budgeting implies the use of value-added actions based on a concept comparable to Activity-based cost and Activity-based management. Assets allotment decisions are unswerving with ABM scrutiny in support of this view (Hansen, Kristian, and Terkel 2009), which involves structuring organizational activities to meet external and customers’ needs.

Zero-based budgeting forces managers each year to justify their budgets in an attempt to avoid dysfunctional behaviour and games of budget. Furthermore, Hansen (2009) requires an extensive and in-depth analysis of this
approach. While its application in industry and government has been encouraging, it is protracted and pricey.

Thirdly, a value-based technique is concerned with building capital and strategic linkages between shareholders. Profit methods take into account both short and long-term projections while ensuring that adequate cash is generated to achieve their goals and that survival is ascertained.

Finally, rolling budgets create frequencies to make available more precise forecasts. Thus, a separate budget is prepared every month or quarter, making it more pragmatic and a justifiable performance assessment measure (Garrison and Noreen 2003). The core challenge of this budgeting technique is that it is time consuming if efficiency is required, which is likely to lead to more dissatisfaction with the processes.

3. Concept of Organizational Survival

Business management has done to with developing a detailed program of anticipated progress knowing that every business owner should plan as if at the same time there is going to be a downturn in business. It takes planning to get ventures thrive difficult times. And when the bad times show themselves, only an articulated plan can guarantee its survival.

Survival is one of any organization’s main goals in today’s competitive world. To achieve its goals and become market leaders, each venture demands to be dissimilar and accelerating from the competitors. This however eminent from introducing new goods and services and value addition.

Mulgan and Albury (2003) “fruitful invention is the formation and carrying out of new processes, goods, services, and distribution approaches that result in substantial advances in competence, success or excellence results”. The innovation procedure of unravelling for chances and avenues of innovation, picking best selections, executing them and securing the benefits of implementation allows the organization to lessen costs, upturn efficiency, upturn sales and eventually increase viability. But client consummation is the key motive for novelty. If the clients are not properly handled, the objective of business is frustrated.

Business success entails detailed thinking that offers, research-based tactic to fashioning a sustainable strategy purposely meant to satisfy today’s customers and place the venture outpace while positively changing the society, the environment, community, and the bottom line. Fruitful ventures are those that are proficient of achieving their goals and objectives overtime, not to mention being respectful and admired by the employees, stakeholders and community. Along vision and purpose, the external environment particularly its predictability and compatibility also plays a role in the success and survival of the organization. Organizations tend to pursue how they grow their business, run the day-to-day activities etc. to ensure their survival is ascertained. Organizational survival provides the tools needed to apply risk management, scenario planning and due diligence to sustainability initiatives through their innovative social, economic, environmental, ethical commitment model. It is a comprehensive approach to support and lead change within an organization. Therefore, according to Simon Mainwaring organizational survive is a step-by-step road map for how to transform your corporate destiny and build a sustainable future for all.

3.1 The Progressive Budget Theory

This theory was postulated by Mabel Walker in the late 1920s’, the only American writer that gave thought to the difficult of allocation of expenditures. The theories of public outlays were evaluated by Mabel and a technique for determining the affinities in the allocation of expenditures was devised built on the supposition that the custom of expenditures unswerving with the state of progress presently achieved by the society would be pointed out. It focused on the fact that through the utilitarian ideal of indifference point in the theory of economics applied to government financial plans the process of identifying how to allocate between options was identified. The representation of balance between the demand of citizens and the provision of government science was a measure of the current expenditure which was called the indifference point. It is preferable to rely on an economic idea based theory of expenditure than to be dependent. The theorists wa exact that living standard in cities and the capacity to pay for it. Walker concluded that the idea of marginal utility was necessary, but it needed according to the broadminded- values” or “human nature values (Beckett, 2002, Walker 1951. Hildreth and Zorn, 2005, Walker, 2009). The allocation of expenditures as stipulated in this theory is done through budgeting and control has to put in place in ascertaining their goal which is referred to as
budgetary control which affects organizational survival.

### 3.2 Empirical review

Duke and Dundas (2003), Carried out a survey study of 54 medium and large firms, both listed and non-listed and found out that most companies are preparing long-range plans and operating budgets, and using budget variance to measure performance to recognize problems on time and improve the budget for the next period.

Akintoye (2008) established a positive correlation between budgetary control and firm performance. The independent variable is budgetary control was measured with turnover whereas dependent variable firm performance was measured with net asset per share, dividend per share and earnings per share.

Yucel and Gunluk (2007) in their research on the relationship between budgetary control and firm performance established a positive correlation. However, the performance was negatively correlated with rigid budgetary control practices.

Gacheru (2012) sought to identify the relationship between the budgeting process and the variance in the budget. She used a sample of 20 based on a population of 6,075 to collect data and descriptive data analysis showed that budget preparation, control and implementation had a significant impact. Ade (2012) and Hope & Fraser (1997) also found a positive and significant relationship between budgetary control and financial performance.

Akeem (2012) in his study found that many manufacturing firms in Nigeria do not employ adequate budget systems while others use shallow based budgeting approach hence, the study recommended that these firms should employ extensive budgeting approach.

### 3.3 Methodology

This study adopted the Ex-Post- facto research design because the data relating both dependent and independent variables already exist in literature and the population includes the entire listed manufacturing companies in Nigeria. Based on availability of nature of data required, a sample of (38) thirty-eight companies were used. Secondary data extracted from annual accounts of the companies covering a period of five years each from 2015 to 2019 were employed for test of hypotheses. The tested (dependent) variable in this study is organizational survival (SVL) measured with age of firm, calculated as present year less year of incorporation. The predictor Variable (independent) variable is budgetary control measured change in operating costs (COC), change in profit (CIP), sales growth rate (SGR) of the companies in our study.
3.3.1 Model specification

The research work specified the below model towards satisfying the main objectives of the study.

\[ SVL(\text{Age}) = f (\text{COC}, \text{CIP}, \text{SGR}) \]  

The above model can be transformed into a linear equation and thus be represented as:

\[ SVL(\text{Age}) = f (\beta_0 + \beta_1 \text{COC}_1 + \beta_2 \text{CIP}_1 + \beta_3 \text{SGR}_1 + \mu_1) \]

Where:

SVL = organizational Survival (Dependent Variable)  
COC = Change in Operating Cost (Independent Variable)  
But operating cost = cost of goods sold + operating expenses.  
OC = operating cost  
P = Profit  
COC = OC_2 - OC_1 (COC equal difference between the operating cost of two consecutive years.)  
CIP = Change in Profit (Independent Variable)  
But profit = Sales – Expenses  
Therefore:  
CIP = P_2 - P_1 (change in profit equal to the difference between two consecutive years of profits)  
SGR = Sales growth (Independent Variable) = (Current Period Net Sales – Prior Period Net Sales) / Prior Period Net Sales * 100

\[ \beta_0 = \text{The intercept}; \beta_1, \beta_2, \beta_3 = \text{The parameter estimates (Coefficient)}; \mu_1 = \text{The error term} \]

4. Data Analysis and Discussion

4.1 Descriptive Statistics

From table 4, the least and extreme COC of the tested businesses are 4.62 and 6.89. Average value of 5.7739 with a standard deviation of about .68168 was also indicated. CIP showed smallest and highest value of 4.61 and 6.87 correspondingly. The average value is 5.6826, while the standard deviation of .65816 was designated. Furthermore, SGR stated a tiniest of .00, an extreme value of .97, a mean value of .2917 and a standard deviation of .25791. Age of company (AOC) showed a lowest and all-out value of 2.20 and 5.56 individually. The average point of 3.7222 with standard deviation value of .67291.

### Table 1. Descriptive Statistics of the variables in our study

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>190</td>
<td>4.62</td>
<td>6.89</td>
<td>5.7739</td>
</tr>
<tr>
<td>CIP</td>
<td>190</td>
<td>4.61</td>
<td>6.87</td>
<td>5.6826</td>
</tr>
<tr>
<td>SGR</td>
<td>190</td>
<td>0</td>
<td>0.97</td>
<td>0.2917</td>
</tr>
<tr>
<td>AOC</td>
<td>190</td>
<td>2.2</td>
<td>5.56</td>
<td>3.7222</td>
</tr>
</tbody>
</table>

Valid N (listwise) 190

Source: Authors’ computations from SPSS result, 2020

4.2 Test for Normality

The result of Skewness for COC is -.133, signifying that the values for COC are twisted to the right but not too distanced from zero. Kurtosis for COC-1.280 (Table 2), representative relative peakedness. Even though both Skewness and Kurtosis submit unusually distribution, the amount of observations considered (190) is huge to weaken the inconsistency which the kurtosis and Skewness observed (Tabachnick & Fidell, 2001 and Pallant 2001). For emphasis,
a histogram in the figure 1 exposes a bell-shaped curve which infers normality of the data.

Table 2. Skewness and Kurtosis table for change in operating costs of companies in our study

<table>
<thead>
<tr>
<th>Skewness</th>
<th>Statistic</th>
<th>Kurtosis</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>-0.133</td>
<td>COC</td>
<td>-1.28</td>
</tr>
</tbody>
</table>

Source: Authors’ computations from SPSS result, 2020

Figure 1. Histogram showing normality test for (COC) change in costs of the companies.
Source: Chartered by Authors’ 2020.

For change in profit (CIP) the test for Skewness presented a worth of .190 and this connotes that CIP is completely skewed. The kurtosis value of -1.152, agrees that it is peakedness. But histogram showed a normal bell shape curve as contained below.

Table 3. Skewness and Kurtosis table for change in profit of companies in our study

<table>
<thead>
<tr>
<th>Skewness</th>
<th>Statistic</th>
<th>Kurtosis</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP</td>
<td>.190</td>
<td>CIP</td>
<td>-1.152</td>
</tr>
</tbody>
</table>

Source: Authors’ computation from SPSS result, 2020
For sale growth rate (SGR) test, the Skewness of 1.041. This implies that SGR is positive. The kurtosis value for SGR is indicated to be -.058 again this means is relatively peakedness though the histogram is not well bell-shaped the quantity of observations (190) could be responsible (Tabachnick & Fidell, 2001 and Pallant 2001).

**Table 4.** Skewness and Kurtosis table for change in profit of companies in our study

<table>
<thead>
<tr>
<th>Skewness</th>
<th>Statistic</th>
<th>Kurtosis</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGR</td>
<td>1.041</td>
<td>SGR</td>
<td>-.058</td>
</tr>
</tbody>
</table>

Source: Authors’ computation from SPSS result, 2020
From table 5, skewness value for the age of the companies (AOC) is indicated as 0.144 meaning that AOC is positive. Kurtosis is indicated to have a positive statistical value of 0.168. The histogram is well bell-shaped indicating that AOC is normally distributed as shown in figure 4.

Table 5. Skewness and Kurtosis table for age of companies in our study

<table>
<thead>
<tr>
<th>Skewness</th>
<th>Statistic</th>
<th>Kurtosis</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOC</td>
<td>0.144</td>
<td>AOC</td>
<td>AOC</td>
</tr>
</tbody>
</table>

Source: Authors’ computation from SPSS result, 2020
4.3 Test for Outliers

We employed box plot for outlier test, Figure 5 shows that there are no outliers for Change in operating costs (COC), change in profit (CIP). The outlier indicated for sales Growth of the companies (SGR) is very minimal to undermine our result, same for the age of companies (AOC). This is there are no asterisk within the outliers, hereafter no data cases that will misrepresent the outcome.
4.3.1 Multi-collinearity test

We employed the tolerance and variance inflation factor (VIF) for multi-collinearity test for the independent variables in this study.

Table 6. Test of multi-collinearity

<table>
<thead>
<tr>
<th>Skewness</th>
<th>Statistic</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>0.987</td>
<td>1.013</td>
</tr>
<tr>
<td>CIP</td>
<td>0.983</td>
<td>1.018</td>
</tr>
<tr>
<td>SGR</td>
<td>0.991</td>
<td>1.009</td>
</tr>
</tbody>
</table>

Source: Authors compilation from SPSS result, 2020

Table 6, presented tolerance rate of 0.987, 0.983 and 0.991 are less than 0.10, meaning confirming absence of collinearity. Again, VIF rate of 1.013, 1.018 and 1.009 affirms the goodness of fit (Pallant, 2001).
Table 7. Regression results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3.784666</td>
<td>0.054609</td>
<td>69.30466</td>
<td>0</td>
</tr>
<tr>
<td>COC</td>
<td>-0.011228</td>
<td>0.006886</td>
<td>-1.630408</td>
<td>0.1054</td>
</tr>
<tr>
<td>CIP</td>
<td>0.014319</td>
<td>0.007192</td>
<td>1.991006</td>
<td>0.0485</td>
</tr>
<tr>
<td>SGR</td>
<td>0.028564</td>
<td>0.020685</td>
<td>1.38095</td>
<td>0.1696</td>
</tr>
</tbody>
</table>

Adjusted R-squared 0.992297  F-statistic 605.7146  Prob(F-statistic) 0  Durbin-Watson stat 1.07284

Source: Authors' computation from E-view result, 2020

Table 7 above presented the multiple regression results. The adjusted R value of 0.992297 presented nearly 99.22%, is denotation that 99.22% of the vicissitudes detected in the described variable is prejudiced by the forecaster variables, only 0.78% is left. The F-Statistic 605.7146 indicated a probability rate of 0.000000 and affirms correctness of model.

However, only one out the three predictor variables is found to be significant. Therefore, we accept the null hypotheses and conclude that there is no significant relationship between change in operating costs, change in profit, sales growth rate and age of manufacturing companies in Nigeria.

4.3.2 Discussion of Results

Statistical evidence from table 7 indicated that the change in operating profit is shown to have a positive statistically significant value of 0.014319. Both the direction and magnitude of co-efficient of Change in Operating profit variables connote direct association between profit and survival as well as the predictive power of profit to the survival of the companies under consideration. It further suggests that the budgetary effort of the manufacturing companies in Nigeria are concentrated on profit planning for growth and survival. Our finding is consistent with the study of Gacheru (2012) and Ade (2012). Change in operating costs (COC) has a negative and insignificant co-efficient value of -0.011228 in relation to the age of the sampled companies. The implication is that the longevity of the companies is not determined by the operating costs any particular point in time. This is commonsensical in that if a company makes enough sales, it can consummate the cost and deliver a good return to the owners. It further reveals (by the negative sign) that costs and survival move in opposite directions. The implication of this result is that cost is that manufacturing companies do not consider changes in operating costs in their budgets hence, there are no control measures put in place to ensure its adverse effects do not affect the survival of the company. This finding corroborates the finding of Akeem (2012).

Table 7 also indicated that sales growth co-efficient of 0.028564 is positive but insignificant. The positive direction reflects the direct relationship between sales growth and survival of entities. It should be understood that the higher the sales growth, the higher the profit which is invariably the primary objective of most organisations. However, the insignificance of the sales growth value is indicative of the fact that they were insignificant sales growth for the sampled companies. Hence, no significant effect on the Survival of the entities. It could be because the strategy employed to boost the sales may not economical to the company, though this is without prejudice to the size of the company. Again, our finding is in line without the finding of Marcormick and Hardcastle (2011).

A practical application of budgetary control could be to identify a line of a project for a business. Make an estimate its source and costs, and then compare projections and of course adjust future spending to bring the reality and the projections into alignment.

One of the limitations of this study was data gathering as the author needed to compute the data from the financial statement of the companies’ involved. However, the researchers were able to overcome through perseverance.
5. Conclusion and Recommendations

This study examined the effect of budgetary controls on the survival of manufacturing companies in Nigeria. The paper utilised simple descriptive and inferential statistics to find out if the change in operating costs, changes in profit and sales growth rate affects the survivability of the manufacturing companies in Nigeria. The result from our analyses indicates a strong association between profit and survival of the company. This demonstrates that if profit is well planned through effective budgeting and budgetary control, it will enhance the longevity of corporate entities especially manufacturing companies. The results also show that change in operating costs and sales growths are not strong influencers of survival of manufacturing companies in Nigeria. Based on the results, the paper concludes that budgetary controls are a significant determinant of survival of manufacturing companies in Nigeria. Our findings are consistent with prior studies especially those of Marcormick and Hardcastle (2011), Akeem (2012), Gacheru (2012) and Ade (2012). Consequently, the paper made the following recommendations: That manufacturing company should concentrate on profit planning using the instrumentality of budgetary planning to enhance profitability and ultimately improved the longevity of the business. Cost control strategies that support profit planning should be adopted. Also, sales campaigns to enhance its impact on the profitability and the sustainability of the company should be attempted.

6. Significance of the study

This study will be of immense contribution to management of manufacturing companies as it will show how budget and budgetary control can be used to maximize shareholders wealth. It will also indicate how budgetary control measures can be used achieve profit maximization objective of the businesses.

7. Contribution to knowledge

This study investigated budgetary control and survival of manufacturing firms: Evidence from Nigeria. It employed change in operating costs, change in profit and sales growth rate as measure of budgetary control, while age was used to measure survival of the companies in our study. This has reviewed few techniques employed by previous studies and also age a measure of survival of the companies in our which to best of our knowledge, no other study has done.

This study contributes to SDG8 economic growth in the sense that if the techniques of budgetary control is applied, it will certainly lead to increase in profit of the firms and subsequently economic growth. It will also reduce poverty level of the people because profitability which leads to expansion will of course create employment opportunity for the people thereby reduce poverty rate.

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