ISSN: 2230-9926

Available online at http://www.journalijdr.com

IJDR

International Journal of Development Research
Vol. 14, Issue, 03, pp. 65215-65223, March, 2024
https://doi.org/10.37118/ijdr.27934.03.2024

RESEARCH ARTICLE

OPEN ACCESS

ASSESSING THE LINK BETWEEN BUDGETING, STRATEGIC PLANNING, AND CONTROL IN SHAPING PROFITABILITY: EVIDENCE FROM MANUFACTURING COMPANIES IN EQUATORIAL GUINEA

***Veracruz Nchama Nguema Andeme**

School of Management and Economics, Hubei University of Technology, Hubei - China

ARTICLE INFO

Article History:
Received 03rd January, 2024
Received in revised form
19th January, 2024
Accepted 06th February, 2024
Published online 30th March, 2024

Key Words:

Budgeting, Planning and Controlling, Manufacturing Companies, Profitability, Equatorial Guinea.

****Corresponding author:***
Veracruz Nchama Nguema Andeme,

ABSTRACT

Budgeting, planning and controlling have become important concern for every organization that strives to survive and achieve profitability in a dynamic and competitive business environment. A comprehensive organizational structure underpinned by a strategic management function such as budgeting, planning and controlling is a pivotal hallmark for maximizing profit which can subsequently snowball to other superior performances. Some organizations are suffocating financially in this current economic crisis due to lack of proper planning, controlling and budgeting. The present study sought to examine the impact of budgeting, planning and controlling on the profitability of manufacturing firms in Equatorial Guinea based on the experiences of some selected manufacturing companies in the Malabo city of Equatorial Guinea. The research used the quantitative approach, survey method, and questionnaire for the data collection process. A sample size of 24 respondents comprising the top management, middle management and lower management were engaged in the study. The data was analysed using the IBM SPSS 23. The results indicated that manufacturing firms adopt management functions in their operations. There spondents also showed that budgeting, planningand controlling have positive impact on the growth and development of their organizations. The result further indicated that budgeting, planning and controllingare important determinants of profit ability of manufacturing firms. The researchers recommended that managers employ budgeting, planning and controlling in theoperations of their business since these management functions have implications on the financial performanceof their organizations.

Citation*: *Veracruz Nchama Nguema Andeme, 2024. *"Assessing the link between budgeting, strategic planning, and control in shaping profitability: evidence from manufacturing companies in equatorial Guinea". International Journal of Development Research*, 14, (03), 65215-65223.

INTRODUCTION

Budgeting, planning and controlling have become important concern for every organization that strives to survive and achieve profitability in a dynamic and competitive business environment. This is based on the fact that a comprehensive organizational structure underpinned by a strategic management function such as budgeting, planning and controlling is a pivotal hallmark for maximizing profit which can subsequently snowball to other superior performances (Ibrahim & Mustapha, 2019). Siyanbola, (2013) and Wiredu *et al.*(2023)posits that, academicians, managers, policy makers and other stakeholders, over the years have developed keen interest in unearthing the key determinants of the growth, profitability and success of manufacturing companies around the world. This is important in the sense that identifying the key factors that anchor a manufacturing firm's profitability will enable firms in the industry to strategically plan, and comprehensively develop tailored policies that will help improve the general performance of the organization (Mustapha, 2019 and Wiredu, 2024). Research has established that most managers do not pay critical attention to some of the management functions which potentially affect the general performance of the organizations. Some organizations are suffocating financially in this current economic crisis due to lack of proper planning, controlling and budgeting. Research has established that lack of effective planning, controlling and budgeting has negative implication on the financial performance of business organizations (Siyanbola and Raji, 2013; Wiredu *et al*., 2023). Accordingly, *profitability* is one of the key determinants of the performance and success of an organization as it plays important role in the structure and growthof manufacturing firms (Bhutta & Hasan, 2013). According to Evans (2020), profitability is the size of the profit of business organization relative to the size of that organization (p. 1). Evans (2020) further mentioned that profitability is the measure of how efficient a business organization uses its available resources to make profit. One of the overarching objectives of every business organization is to maximize profit as it enhances the reputation of that organization. Research reveals that, there are diverse factors, internal and external, which are significant in amplifying profits of business organizations (Bhutta & Hasan, 2013; Wiredu, Labaran, *et al*., 2020). Factors such as size of the organization, level of productivity, liquidity, growth, efficient management of raw material inventory, fixed assets and working capital have been revealed by researchers as the major factors that influence or impact the profitability level of firms (Al-Samman and Al-Jafari, 2015; Siyanbola, 2013; Bhutta and Hasan, 2013; Ibrahim and Mustapha, 2019; Boateng, 2015). A study by Bhutta and Hasan (2019) to determine some specific factors which affect the profit of manufacturing organizations in Pakistan revealed that, the ability of firms in the manufacturing industry to remain profitable is shaped by the organization's specific factors and not macroeconomic variables.Eze (2014) posits that, whilst some scores of scholars argue that organization wide factors are integral in determining the profitability and performance of the organization, other scholars argue that improvements in the internal structures and managerial efficiency are the key determinants of organization's profitability and performance. A study by Dodoo *et al*. (2020) to establish the factors that influence the performance of firms in Equatorial Guinea revealed that the size of the firm, growth rate and cash flow ratio have a direct andpositive impact on the performance of business organizations, whereas debt to equity showed a negative influence on the performance of firms. However, little to no research has been conducted to ascertain the impact of planning, controlling and budgeting on profitability of manufacturing firms in Equatorial Guinea. This current study therefore seeks to determine the impact of budgeting, planning and controlling, which are key internal and managerial functions on profitability of organizations in the manufacturing industry in Equatorial Guinea.

Furthermore, a popular cliché holds that, "failing to plan is *planning* to fail." This popular cliché clearly depicts the essence of planning in every organization. Ibinwangi (2019) defines planning as a managerial process of deciding the long term and short-term goals that an organization seeks to achieve within a future time frame and implementing strategies that will enable the organization to achieve those goals. The importance of planning to profit maximization and overall performance of a business organization cannot be underestimated. In today's highly competitive and technology driven market, business organizations without preconceived plan cannot enter the market with their products (Sulaymonov, 2018). A good business plan enables business organizations to focus on the specific steps that are essential in making business ideas succeed and also ensure that the goals and objectives of the organization are achieved. A study by Alonso-Vazquez (2018) to determine the importance of planning to business organizations revealed that a carefully designed business plan can help managers to facilitate decision-making, reduce their risk perception, and increase their chances to succeed. Additionally, *controlling* entails the measuring of the performance of events relative to the standard of the plans, and the correction of deviation to ensure that goalsare attained in accordance with plans. Control is required once a plan is put into effect in order to monitor development, identify plan deviations, and suggest appropriate course of action (Koontz, *et al*., 1980, as cited in Sulaymonov, 2018). It is important to note however that, without a clearly defined plan, controlling cannot be operational. Planning and controlling are like two sides of the same coin. However, planning is done before control measures are implemented because controlling only takes place after a clearly thought through plan has been operationalized. This ensures that the plan does not deviate from its intended purpose (Sulaymonov, 2018).

An organization's goals and objectives can better be defined to enable employees and resources focus on achieving them when control measures are properly implemented. Proper control measures safeguard the organization against misuse of resources and facilitate the implementation of corrective measures when there are deviations. Čambaliková and Misun (2017) conducted a study using a survey of 331 manufacturing companies to ascertain the importance of control in the work of managers. The result showed that an important benefit of controlling function is that it ensures that accurate information needed by management to make effective decision and maintain effective operations of the organization is always available. Nicolae and Anca (2010) argue that "*budgeting* is a management instrument used by any organization, financially ensuring the dimension of the objectives, revenues, expenses and results at the management centers level and finally evaluating the economic efficiency through comparing the results with those estimated for" (p. 919). Budget can also be defined as "management tool that entails a quantitative statement of a clearly defined plan of action for aspecific period of time" (Bufan, 2013). Budgeting is a process which implies formulating or mapping up plans in numerical form. (Bufan, 2013) posits that, "budgets are required to highlight the financial consequences of plans, specify the resources needed to carry them out, and give a way to gauge, monitor, and manage results in relation to the plans." A dynamic process that connects objectives, planning, decision-making, and employee performance assessment is budgeting (Maher & Deakin, 1991, as cited in Bufan, 2013). Sulaymonov (2018) argues that one obvious benefits of budgeting to a business organization is that it enables managers to monitor the income and expenditure in order to identify any problems. It also enables managers to determine the amount of money needed to undertake certain activities in the organization. Also, the Macias Nguema led government initiated the industrialization drive that increased manufacturing companies share to the nations GDP from 10 percent in 1975 to 14 percent in 1980 after Equatorial Guinea's independence in 1968. This resulted in the creation and expansion of relatively wide range of small and large industrial companies such as the Bata Aluminum Company (Balco), cement manufacturing, oil refining, textile companies, sawmills, cocoa processing plants, breweries, timber processing plants and water treatment companies (Osei, 2017). The drive for industrialization came to a point of stagnation when the CFA was overvalued; inability to purchase raw materials due to shortage of hard-currency and poor management of state institutions resulted in a decline in the industry in 1982.

The performance of the manufacturing industry remained and never recovered fully after the decline in the sector in 1982. After 1983, there was adrastic devaluation of the CFA which made it very expensive for business owners to purchase inputs to feed their companies. There were also very strict monetary regulations by the Enterprise Resource Planning (ERP) that resulted in liquidity crises in the manufacturing sector. Osei (2017) and Sampene *et al*., (2021)posits that tight policies of the Enterprise Resource Planning (ERP) led to the closure of about 120 factories in 1988 including leather, garment, electronic and electrical and pharmaceutical sectors, mainly due to competitive imports. ERP policies made it difficult for the government to assist local industries or even moderate some policies to the benefit of manufacturing companies in Equatorial Guinea. Meanwhile it is long held that a thriving private sector is important in economic growth, and the local industries have played very important role in the growth of the private sector(Wiredu J., *et al*., 2023). The liberalization of the Equatorial Guinean economy augmented by the initiation of various home grown and World Bank policies in the past three decades have had an impact on the manufacturing sector in Equatorial Guinea (Gatsi *et al*., 2013). Apart from the ERP policies and other macroeconomic factors that affects the financial performance of manufacturing companies, internal factors such as management skills, capital; level of education and external relations negatively affects the financial performance of manufacturing industries in Equatorial Guinea. Osei (2017) suggested that managers should upgrade their skills and that of their employees to be able to meet changing trend in consumer taste and preferences and employ the services of competent people with expertise in management to expand the manufacturing industry and increase their profit margins. This current study therefore seeks to investigate the impact of management functions such as planning, budgeting and controlling on the ability of manufacturing organizations to remain profitable inEquatorial Guinea.

Motivation and contribution of the study:The current research focuses on Equatorial Guinea because the manufacturing industry today employs many strategies and concepts to reduce cost, improve productivity and increase profitability at this period of global economic recession (Adarkwa *et al*., 2018).Duetothe recent economic crises, manufacturing companies have devised many strategies to increase profit in order to stay afloat and survive in this difficult time in Equatorial Guinea.This unprecedented rate of global economic recessionhas motivated the authors of this study to evaluate the role of budgeting, planning and controlling on profitability from selected manufacturing companies in the central region of Equatorial

Guinea.Therefore, the essential purpose of this study is toascertain the relationship between budgeting, planning and controlling and profitability of manufacturing firms, assess whether manufacturing companies develop keen interest in the management functions such as budgeting, planning and controlling. Additionally, we ascertain the contribution of planning, controlling and budgeting to the financial performance of manufacturing companies in Equatorial Guinea. Lastly, to highlight the effects of poor management functions on the ability of organizations in the manufacturing industry to make profit in Equatorial Guinea. Consequently, in order to achieve the objectives of the study, the following research questions were designed; (*RQ1)* What relationship exists between budgeting, planning and controlling and profitability of manufacturing companies in Equatorial Guinea? *(RQ2)* Do manufacturing companies develop keen interest in budgeting, planning and controlling as a management function? *(RQ3)* What are the contributions of budgeting, planning and controlling to the financial performance of manufacturing companies in Equatorial Guinea? *(RQ4)* What are the effects of poor budgeting, planning and controlling on profitability of manufacturing companies in Equatorial Guinea?

The contributions of this present study are as follow; ***First,*** theoretically, the current paperenrichesthe administrative management theory (AMT) by examining the role of budgeting, planning and controlling on profitability ofbusiness organization. ***Secondly,*** this contemporary study offers new insight into the role of budgeting, planning and controlling on profitability of manufacturing companies in the Malabo city of Equatorial Guinea, thereby contributing to existing body of knowledge. ***Lastly,*** in terms of practical contribution of this paper, the findings of the study will enable managers, governments, investors, and stakeholders appreciate the importance of budgeting, planning and controlling to the financial performance of their organizations. This will enable them to put in place; important strategies to ensure that management functions are properly executed.The remainder of the paper is arranged as follows; chapter two of the study entails the theory that underpins the study andreview of related literature. Chapter three provides a thorough explanation of the research methodology, research design, demographic, sample size, and data collection procedure. Chapter four presents the study results and discussions. Chapter five provides the conclusion, limitations and recommendationsfor future studies.

Definition of Terms: Definition of terms have been presented in this part.

Budgeting: Budget can be defined as management tool that entails a quantitative statement of a clearly defined plan of action for a specific period of time. "Budgeting is a management instrument used by any organization, financially ensuring the dimension of the objectives, revenues, expenses and results at the management centers level and finally evaluating the economic efficiency through comparing the results with those estimated for."

Planning: Planning is a managerial process of deciding the long term and short-term goals that an organization seeks to achieve within a future time frame and implementing strategies that will enable the organization to achieve those goals.

Controlling: It is the process of measuring the performance of events of an organization relative to standard of plans, and correcting deviations to ensure that goals are attained with regard to the plans. Control is required once a plan is put into effect in order to monitor development, identify plan deviations, and suggest appropriate course of action.

Profitability: Profitability is the measure of how efficient a business organization uses its available resources to make profit. Maximizing the profit of a business organization is one of the most important goals of managers as it enhances the reputation of that firm.

ERP: Enterprise Resource Planning is a consolidated process of collecting and organizing the data of business organizations through an integrated system. During the industrial drive in the past, policies of the ERP and World Bank prevented the government from initiating some important interventions to salvage the challenges faced by the manufacturing industry in Equatorial Guinea.

Liquidity: It is the ability of business organizations to change its asset, or security into ready cash when it needs it. There two major determinants of the position of a company's liquidity; thus, its ability to convert asset to cash to be able to pay its liabilities and the measure of its debt capacity.

Theoretical Underpinning and Literature Review

Administrative Management Theory: This study is grounded on the administrative management theory propounded by Henri Fayol in the early 1900s. Henry Fayol postulates that managers are supposed to perform some important functions to enable the organization to achieve its goals and objectives. Henri Fayol identified five management functions, which are "planning, organizing, command, coordination, and control." These five functions are embedded in "management", one of the six important industrial activities performed by management which are described in Henri Fayol's management theory. Throughout the twentieth century, this theory had a significant influence on the development and growth of industrial management practices. Fayol's management theory emphasis strongly on the role of management in an organization as juxtaposed to contemporaries in the area of organizational psychology. Researchers such as Juneja (2015) argues that management functions enable managers to properly arrange the factors of production, organize the resources, and effectively integrate the resources in manner that will enable them to achieve the organization's aims and objectives. By properly defining the objectives of the organization, managers are able to plan, coordinate, direct and control the resources of the organization such that the firm works to attain such goals and objectives. It may be convenient for scholars to separate the functions of management for theoretical purposes; however, in practicality, these functions overlap in nature, and as such are highly inseparable (Juneja, 2015). Management functions blend into each other, and each function affects the performance of others. Some contemporary management scholars have argued that Henri Fayol's management functions are "folklore", however, researcherssuch as Stephen and Dennis (2017) argue that Henri Fayol's management functions represent valid abstractions of what managers do and what they must do to ensure the general performance of the organization. Stephen and Dennis (2017), as well as other researchers have established empirical evidence that Fayol's management theory is relevant for the description of the work of a manager and skills that are essential for a greater organizational performance. Henri Fayol's "management theory" includes three main theories: the six industrial activities, the five functions of management, and the fourteen principles of management.For the purpose of this study, the researchers would focus on the five functions of management which were later extended and coined by Gullick (1936) as POSDCORB to describe his list of the most important management functions. The management functions have been extended to include staffing, planning, organizing, reporting, coordinating and budgeting.

Role of Management Functions to the Financial Performance of Manufacturing Companies in Equatorial Guinea: Anulika (2012) carried out a study to ascertain the role "budgeting plays in managerial planning and control" based on a case study of some selected manufacturing companies in Nigeria. Using primary data and a structured questionnaire to collect samples from 126 randomly chosen respondents, the researcher found that, there exists close relationship between planning, control and budgeting in the selected manufacturing companies. Anulika (2012) also found that 83% of the participants indicated that regular budgeting increases thegeneral performance of an organization as against 17% who answered no. In terms of how budgeting helps management accomplish management plans and control, 64% of the participants indicated that budgeting is an essential tool used by managers to accomplish the goals of the organization as juxtaposed to 36% who said no.In terms of the importance of budgeting in management decision making, the researcher found that 91% of the participants mentioned that budgeting is important in management decision making whilst only 9% said no. Without any element of equivocations, the researcher concluded that budgeting is used by managers in managerial planning and control to maximize profit. The researcher therefore recommended that mangers, business operators and business owners should pay critical attention to budgeting because it helps in effective managerial planning and control which can go a long way to maximize the profit of the organization.

A study by Al-Samman and Al-Jafari (2015) to investigate the "determinants of profitability of companies in Oman" based on a survey of 17 industrial firms covering the period from 2006 to 2013 showed that, there exist "a positive and significant relationship between the size of the organization, growth rate, fixed assets, working capital and profitability of manufacturing organizations." This is an indication that the size of the business organization, the pace at which the organization is growing, the fixed assets that the organization possesses, and the working capital are the major factors that determines the profitability of manufacturing industries in Oman. Apart from these variables, other factors such as poor budgeting, planning and controlling also go a long way to affect the profit margins of manufacturing industries. However, the researchers also found that, profitability has negative and insignificant relationship with average tax rate and financial leverage variables. The researchers concluded that large business organizations which are able to manage their working capital efficiently command higher profits.

Determinants of Profitability of Manufacturing Firms during a Global Economic Crisis: Nanda and Panda (2017) conducted a study to establish the factors that affects a firm's profitability during "pre-crisis and post-crisis period measured by Return on Asset (ROA) and Net Profit Margin (NPM)." The researchers split the factors into two groups; thus, "firm-specific (internal) factors and macro-economic indicators." The researchers discovered that exchange rate and firm-specific variables are important in determining how profitable Indian manufacturing enterprises are. Nanda &Panda (2017) and Wiredu, Bo, *et al*., (2021)also found that the "size of the firm and liquidity enhances the profitability of firms" whilst leverage discourages the profit margins of firms. The researchers also found that at periods of economic downturn and crisis, larger business organizations survive due to diversification, whilst smaller organizations suffer more, and therefore find it difficult to survive. The study also found that "firm-specific factors and macroeconomic factors" are the dominant indicators in determining the net profit margin (NPM) of firms. All the key firm-specific determinants apart from total asset significantly affect the net profit margins of firms in India.

A study by Havi and Enu (2014) to determine the "macroeconomic factors" that affect the performance of manufacturing companies in Ghana using the approach of the multivariate time series revealed that, in the long-run, macroeconomic factors such as labor, private sector credit and real exchange rate weighed down the performance of the manufacturing sector. Meanwhile, real exchange rate and past years' consumer price index negatively affected manufacturing companies in the short-run. This development implied that, lack of effective implementation of financial policies and effective managerial functions have negative consequences for manufacturing's financial performance of companies in Equatorial Guinea. The researchers recommended that, credit to the manufacturing sector must be improved, undertake skillful training of managers and employees and proper implementation of policies to stabilize the real exchange rate must be put in place salvage the declining manufacturing sector.

Impact of Manufacturing Firms on Equatorial Guinea's Economy: Osei (2017) and Wiredu, Yang, *et al*., (2021) conducted a study to investigate the factors that impact Equatorial Guinea's manufacturing sector's competitiveness emphasizing on both the internal and external constraints as well as the impact of the sector on Equatorial Guinea's economy. The research used the questionnaire as the main instrument for collection of primary data from the respondents. Michael Porter's theory was used in the data analysis of the competitiveness of local manufacturing companies in Equatorial Guinea. The researcher found that, managerial skills, specifically, the capabilities of the human resource of an organization are one of the core competences that every manufacturing firm needs in order to survive in this competitive business environment. The researcher also found that business owners and managers are able to hire skilled and educated labor force to run the organization when they are educated. The study further revealed that lack of strategic planning, control measures and budgeting had the tendency of affecting the financial performance of the organization. The research also established that the manufacturing industry contributes significantly (about 25.3%) to Equatorial Guinea's Gross Domestic Product (EGDP). Not with standing the contributions of the sector to Equatorial Guinea's GDP, the sector also provides employment to a lot of Equatorial Guineans. The researcher recommended that business owners and managers must acquire business management skills such as marketing, financial management, leadership skills and ability to effectively use management functions to be profitable in order to compete in the business environment. Research by Equatorial Guinea Invest Promotion (2022) and Wiredu *et al*., (2020) also shows that, the industrial drive of Equatorial Guineawas a major growth of the economy from 2017 to 2019. The study also revealed that the manufacturing industry has the potential to revolutionize the country's economy by widening the county's production and exports base whilst ensuring an increase in employment, income and revenues from exports. The contributions of the manufacturing sector to Equatorial Guinea's economy has called for the need of government to implement policies such as the "Factory Expansion" initiative to transform the manufacturing industry.

RESEARCH METHODOLOGY

The study sought to ascertain the impact of management functions such as planning, budgeting and controlling on profitability of manufacturing companies in Equatorial Guinea. This study applied quantitative research and used questionnaires as a means of eliciting answers from some selected manufacturing companies in Malabo of Equatorial Guinea to address the study aims and research questions.

Research Approach: Researchers who argue in favor of objectivism use a quantitative approach (Wimmer & Dominic, 2014). This research was based on the quantitative approach. The researchers therefore employed the quantitative method to ascertain the "impact of budgeting, planning and controlling on profitability" of manufacturing firms in Equatorial Guinea. Quantitative approach enumerates and analysis numerical data (Wiredu *et al*., 2022; Wimmer & Dominic, 2014, p. 184). "Quantitative approach makes sense of numbers largely through survey, by extracting specific data including the thoughts, opinions and feelings from a particular group of people" (Wimmer & Dominic, 2014, p. 185). In order to collect relevant data from the population for the study, a survey was used.

Research Design: The researcher adopted the survey method and used the questionnaire as the data collection instrument in gathering relevant data on the topic under investigation. The descriptive statistical analysis was used in the data analysis stage. The study sought to ascertain the following: the relationship that exists between budgeting, planning and controlling and profitability of manufacturing companies in Equatorial Guinea, whether manufacturing companies develop keen interest in budgeting, planning and controlling as a management function, the contributions of budgeting, planning and controlling to the financial performance of business organizations in the manufacturing industry in Equatorial Guinea, and the effects of poor budgeting, planning and controlling on profitability of manufacturing companies in Equatorial Guinea. The data was analyzed using the SPSS 23.

Population: The population of this study comprises of all manufacturing companies in the Malabo of Equatorial Guinea. Data provided by EquatorialGuineaBusinessWeb.com Show that there are about 58 manufacturing companies currently operational at the Malabo of Equatorial Guinea. However, for the purpose of this study, the researcherspurposely sampled two manufacturing companies from the population under study. These firms are U-splash Mineral Water Company and Standard Mineral Water Company. The total population of the participants of the study comprised the total number of workers in these two companies, and the total number is thirty (30) workers, including directors, supervisors and subordinates. Precisely, U-Splash Mineral Water Company has a total of 17 workers whilst Standard Mineral Water Company has a total population of 13 workers. The researchers there fore sample the participants of the study from 30 workers to 24 workers.

Sampling Technique: The study employed the convenience sampling technique for the data collection. Convenience sampling was adopted in this research because it made the target population easily accessible (Wiredu, Yang, Sampene, *et al*., 2023). Also, it made the respondents closer to the researchers, and the participants were available and willing to participate in the study at the time ofthe research. Due to the large number of manufacturing companies in the Malabo of Equatorial Guinea, the researchers purposively sample (2) manufacturing organizations. Using the Krejcie and Morgan (1970) sample size in the figure 1 below, with a 95% confidence level and ±0.05% margin of error, the sample size is 24 out of a population of 25. The figure1 below shows how the sample size was generated using the Krejcie and Morgan's (1970).

N	*S*	*N*	*S*	*N*	*S*	*N*	*S*	*N*	*S*
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	20000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

SOURCE: From R. V. Krejcie and D. W. Morgan, "Determining Sample Size for Research Activities," *Education and Psychological Measurement, 30*, p. 608, copyright © 1970 Sage Publications, Inc., Reprinted by permission of Sage Publications, Inc.

Figure 1. The sample size generated using the Krejcie and Morgan's (1970)

In order to have a fair representation of each manufacturing company, the population of each of the companies (U-Splash Mineral Water and Standard Mineral Water Company) was divided by the total population of the two companies, and then multiplied by the sample size generated from the sampling technique figure 1.The formula for generating the number of students to represent each of the companies to reflect the population is given in the table below:

Table 1. Sample Size Computation

Company	Population	Formula	Sample size
U-Splash Mineral Water	17	$\frac{17}{30} \times 24$	13.6
Standard Mineral Water Company	13	$\frac{13}{30} \times 24$	10.4
	Total= 30		24

Data Collection Instrument: Wimmer and Dominick (2013) argue that a research questionnaire is equally crucial to the study because it provides the foundation for the conclusions of the study. A research questionnaire is a tool that consists of a set of questions created to collect data from research participants during a survey or statistical analysis (Wiredu *et al*., 2021; Wimmer & Dominick, 2013). A research questionnaire was designed and distributed in person to the participants in the selected companies to elicit their respondents to the research questions. As COVID-19 still lingers across the country, social distancing and mandatory wearing of a nose mask was ensured as the researchers engage with the participants. Close-ended questions wasalso implored in designing the questionnaire. A close-ended questionnaire was used by the researcher to gather data from the respondents because close-ended questions ensure easier and quicker answers to the questions, increase the response rate and avoid answers that are irrelevant to the research topic.

Data Analysis: Descriptive statistics complemented by Pearson correlations was utilized to analyze the data that the sample size will gathered. Glasow (2005) and Wiredu *et al*., (2021) argues that "descriptive statistics and Pearson correlations are used to summarize and organize characteristics of a data set." As such, "descriptive statistics" was used to determine the impact of management functions on profitability of organizations in the manufacturing industry in Equatorial Guinea. Hence, IBM Statistical Package for Social Science (SPSS) 23 was used in analyzing the data.

RESULTS AND DISCUSSION

This section discusses the findings from the analysis of the data obtained from the respondents of the study. Based on the aims and objectives of the study, descriptive statistics was used to analyses the data, since the data is quantitative in nature. The study sought to ascertain the impact of budgeting, controlling and planning on the profitability of manufacturing organizations in Equatorial Guinea based on the evidence from two manufacturing companies in Equatorial Guinea. The study further tried to determine the importance of management functions to the profitability of manufacturing firms, and to also ascertain whether poor budgeting, planning and controlling has negative implications on the financial performance of manufacturing firms in Equatorial Guinea. Twenty-four (24) respondents, comprising the senior management, middle management, first-level management, experienced or senior staff, intermediate, and entry or lower-level management.The study used the questionnaire as the data collection instrument for gathering data of the respondents of the study. U Splash Mineral Water Company and Standard Mineral Water Company both located at the Malabo of Equatorial Guinea were used for the study. The data was analyzed using the IBM SPSS Statistics version 23. Below are the results obtained;

Management functions and their impact on growth and performance of manufacturing

Does budgeting, planning and controlling have positive effect on the growth and profitability of your firm?

To ascertain the relationship between planning, budgeting and controlling and profitability of organizations in the manufacturing industry in Equatorial Guinea, the table 2 result above indicated that planning, controlling and budgeting have positive effect on the growth and profitability of manufacturing firms since the majority, 23 respondents, representing about 95.8% mentioned that budgeting, planning and controlling have positive effect on the profitability of their organizations. This implies that budgeting, planning and controlling are determinants of profitability of the two manufacturing firms.

Does your organization undertake management functions?

From the table 3 result above, all the respondents (100) percent indicated that their organizations undertake the management functions. The outcome above shows that about 61% of the respondents from U Splash Mineral Water and about 39% of the respondents from Standard Mineral Water respectfully indicated that they employ management functions in their organizations. This is to suggest that the management of the two companies reckon that budgeting, planning, coordinating, staffing, leading and controlling are very important in every organization.

Table 2.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	23	95.8	95.8	95.8
Valid	No	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 3.

		Frequency	Percent	Valid Percent	CumulativeP ercent
Valid	Yes	24	100.0	100.0	100.0

Source: Field work, 2023.

Do manufacturing companies develop keen interest in budgeting, planning and controlling as management functions?

Table 4. Budgeting

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	20	83.3	83.3	83.3
Valid	No	4	16.7	16.7	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 5. Planning

		Frequency	Percent	Valid Percent	Cumulativ e Percent
	Yes	18	75.0	75.0	75.0
Valid	No	6	25.0	25.0	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 6. Controlling

		Frequency	Percent	ValidPer cent	Cumulative Percent
	Yes	15	62.5	62.5	62.5
Valid	No	9	37.5	37.5	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

From the table 4, 5, and 6 outcomes above, it is evident that manufacturing firms undertake budgeting (83.3%), planning (75%), and controlling (62.5%) in their operations. Controlling, representing about 63% in least operationalized in the two manufacturing companies. However, the result reveals that budgeting, representing a little over 80% is often undertaken in U Splash Mineral Water Company and Standard Mineral Water Company than the other managerial functions. This could be due to reasons particular to these two manufacturing firms.

Contributions of budgeting, planning and controlling to manufacturing firms

What are the contributions of budgeting, planning and controlling to the financial performance of manufacturing companies in Equatorial Guinea?

Table 7. Facilitate decision making

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	23	95.8	95.8	95.8
Valid	No	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 8.Improve financial performance of organization

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	19	79.2	79.2	79.2
Valid	No	5	20.8	20.8	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 9. Enable transparency and accountability

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	6	25.0	25.0	25.0
Valid	No	18	75.0	75.0	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 10. Improve productivity

		Frequency	Percent	ValidPer cent	Cumulative Percent
Valid	Yes	21	87.5	87.5	87.5
	No	3	12.5	12.5	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 11. Improve general performance of organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	62.5	62.5	62.5
	No	9	37.5	37.5	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 12. Help in monitoring performance of employees and Organization

		Frequency	Percent	ValidP ercent	Cumulative Percent
	Yes	22	91.7	91.7	91.7
Valid	No	2	8.3	8.3	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

Table 13. Help in achieving organizational goals and objectives

		Frequency	Percent	ValidPer cent	Cumulative Percent
	Yes	20	83.3	83.3	83.3
Valid	No	4	16.7	16.7	100.0
	Total	24	100.0	100.0	

Source: Field work, 2023

When the respondents were asked to indicate the importance ofbudgeting, planning and controlling to the growth of their organization, the table 7, 8, 10, 11, 12, and 13resultsabove showed that manufacturing firms reckon that budgeting, planning and controlling helps in monitoring the performance of employees, facilitate decision making, improve the general performance of the organization, improve productivity of the firm and increase the financial performance of the firm. The study outcome from the table 7, 8, 10, 11, 12, and 13 affirm the assertion that budgeting, planning and controlling are essential ingredient in insuring decision making, improve financial performance of organization, improve productivity, improve general performance of organization, help in monitoring performance of employees and organization, and finally, help in achieving organizational goals and objectives. Interestingly, the table 9result showed that budgeting, planning and controlling do not ensure transparency and accountability with a (25% - yes) and a (75% - no) in the two organizations. It is therefore evident that budgeting, planning and controlling are important to manufacturing companies in Equatorial Guinea.

Effects of poor budgeting, planning and controlling on manufacturing firms

Does poor budgeting, planning and controlling have positive effect on the growth and profitability of your firm?

When the respondents were asked to indicate whether poor budgeting, planning and controlling have positive effect on the growth and profitability of manufacturing firms, the result showed that 17 respondents, representing 71%, indicated that poor budgeting, planning and controlling have no positive effect on the growth and profitability of their firms. Surprisingly, 6 respondents, representing 25% indicated that poor budgeting, planning and controlling have positive effect on the growth and profitability of their firms. On the other hand, 1 respondent, representing 4% was not sure whether poor budgeting, planning and controlling have positive effect on the growth and profitability of a firm.

organizations revealed that, a carefully implemented management functions can help managers to facilitate decision-making, reduce their risk perception, and increase their chances to succeed and make profit at the long-run. The study also agreed with a study by Sulaymonov (2018) to ascertain the relationship between management functions and the overall performance of business.

Table 14

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	6	25.0	25.0	25.0
No	17	70.8	70.8	95.8
Valid				
Notsure	1	4.2	4.2	100.0
Total	24	100.0	100.0	

Source: Field work, 2023

Table 15. Observed value of X2

	Executives	Middle managers	Experienced	Lower level	Total
Budgeting	15	7	2	0	24
Planning	12	1	0	11	24
Controlling	2	0	1	11	14
Total	29	8	3	22	62

Source: Field work, 2023

Table 16. Expected value of Chi-square X2

	Executives	Middle managers	Experienced	Lowerlevel
Budgeting	11.226	3.090	1.161	8.516
Planning	11.226	3.090	1.161	8.516
Controlling	6.548	1.806	0.677	4.968

Source: Field work, 2023

Calculated value of Chi-square X^2

Observedvalue(O)	Expectedvalue(E)	(O–E)	$(O– E)^2$	$(O–E)^2E$
15	11.226	3.774	14.243	1.269
7	3.090	3.910	15.288	4.948
2	1.161	0.839	0.704	0.606
0	8.516	-8.516	-72.522	8.516
12	11.226	0.774	0.593	0.053
1	3.090	-2.090	-4.368	1.414
0	1.161	-1.161	1.348	1.161
11	8.516	2.484	6.170	0.725
2	6.548	-4.548	-20.684	3.159
0	1.806	-1.806	-3.262	1.806
1	0.677	0.323	0.104	0.154
11	4.968	6.033	36.397	6.033
Total				$\sum X^2$=28.43

Source: Field work, 2023

From the table 16 above, the degree of freedom = (columns – 1) (rows – 1)

The degree of freedom is therefore = (4 –1) (3 – 1) = 3x2= 6

Significancelevel(α)=0.05

Chi square X^2 tabular value = 1.414Calculated value of Chi square X^2 = 28.43

Decision rule: Chi-square of 28.43 calculated, and a tabular value of 1.414, at 5% significance level means that "there is no significant relationship between management functions and the profitability of manufacturing organizations inEquatorial Guinea" because the 1.414 is greater than the standard level of 0.05.

Conclusion and Key Findings: The present study examined and provided empirical results to close the literature gap on the role of budgeting, planning and controlling on profitability of manufacturing companies in the Malabo city of Equatorial Guinea. The researchers applied the IBM Statistical Package for Social Science (SPSS) 23 to analyze the study data. We received 24 valid responses from two manufacturing firms from the Malabo city of Equatorial Guinea. Our study result revealed that: ***first,*** there exists a positive relationship between budgeting, planning and controlling and the profitability of manufacturing firms in Equatorial Guinea. This finding suggests that proper implementation of the management functions can influence the profit-making ability of manufacturing firms in Equatorial Guinea. The finding agreed with a study by Alonso-Vazquez (2018) to determine the importance of management functions to business organizations. The result of Sulaymonov's (2018) study revealed that, there is a positive relationship between management functions such as budgeting, controlling and planning and overall performance of business organizations.

Second, the finding indicated that manufacturing companies in Equatorial Guinea have keen interest in most of the management functions such as budgeting, planning, controlling, coordinating and organizing. This implies that managers reckon that the various management functions are important to their organizations, and as such, develop key strategies and policies to implement the management functions in their organizations. This study agreed with a study by Anulika (2012) to establish the importance of management functions to manufacturing firms which revealed that, there is an inseparable relationship between budgeting, planning and operations of manufacturing firms. The finding is also consistent with a study by Al-Samman and Al-Jafari (2015) to investigate the "determinants of profitability of companies in Oman based on a survey of 17 industrial firms listed on Muscat securities market covering the period from 2006 to 2013" showed that, there exist a strong relationship between profitability, the size of the organization, growth rate, and management functions of business organizations.

Third, the study revealed that the various management functions are beneficial to manufacturing companies in Equatorial Guinea. The respondents indicated that budgeting, planning and controlling improve productivity, helps in monitoring the performance of employees, facilitatedecision making, improve the general performance of the organization, and increase the financial performance of the firm. The study is consistent with a study by Osei (2017) which revealed that, managerial skills, specifically, the capabilities of the human resource of an organization are one of the core competences that every manufacturing firm needs in order to survive in a competitive business environment. Interestingly, the result also showed that budgeting, planning and controlling do not ensure transparency and accountability (25%) in the two companies.

Lastly, the finding showed that poor budgeting, planning and controlling have negative implications on the financial performance of the organizations. This means that when management functions in organizations are poorly implemented, the financial performance of the organization could be affected negatively. Managers must therefore implement rigorous measures to ensure budgeting; planning and controlling are well implemented in their organizations. The study is consistent with a study by Havi and Enu (2014) to determine the "macroeconomic factors that affect the performance of manufacturing companies in Equatorial Guinea" using the approach of the multivariate time series revealed that, lack of effective implementation of financial policies and effective managerial functions have negative implications on the financial and overall performance of manufacturing companies in Equatorial Guinea. Furthermore, the financial question sought to test a hypothesis that state that "there is relationship between budgeting, planning and controlling and profitability of manufacturing companies." The findings revealed that, there is a significant relationship between budgeting, planning and controlling on the profitability of manufacturing companies. This implies that when budgeting, planning and controlling are not well implemented in manufacturing companies, it can affect the overall performance of the organization as well as the profitability of the firm. This finding agreed with a study by Al-Samman and Al-Jafari (2015) to investigate the "determinants of profitability of manufacturing companies in Oman" showed that, there exists a positive and significant relationship between the size of the organization, growth rate, budgeting, controlling, planning and profitability.

Recommendations: The study found that some managers do not implement the management functions in their organizations. It is therefore recommended that, managers employ budgeting, planning and controlling in the operations of their business since these management functions have implications on the financial performance of their organizations. Also, managers who do not implement management functions in their organizations must develop keen interest in the various management functions in order to maximize profit.

Limitationsand future direction of study: Accordingly, the present study has some limitations that need to be considered for future investigation: (1) The study was limited to only two manufacturing companies in the Malabo city of Equatorial Guinea. It is therefore recommended that; a study is conducted in other cities to ascertain whether most of the manufacturing companies in Equatorial Guinea employ the various management functions in their operations.(2) It is also imperative that a study is conducted to ascertain the relationship between budgeting, planning and controlling on the overall performance of manufacturing companies in Equatorial Guinea.(3)It is suggested that a study is conducted to examine the effectiveness of managerial functions in improving the performance of employees in manufacturing companies.

Declaration Statements

Conflict of interest: The author declares no conflict of interest.

Data availability statement: Data used for the study will be provided upon request from the corresponding author.

Funding: This research received no external funding.

Informed consent statement: Not applicable.

REFERENCES

Al-Samman, A. and Al-Jafari, M. K. 2015. Determinants of profitability: Evidence form industrial companies listed on muscat securities market, review of European studies, 7(11), 1918-7178. http://dx.doi.10.5539/ res.v7n11p303.

Anulika, U. N. 2012. The role of budgeting in managerial planning and control: A case study of Guiness Nigeria Plc Bennin, Edo State and Nigerian Breweries Plc Ama, Enugu State.

Bhutta, N. T. & Hasan, A. 2013. Impact of firm specific factors on profitability of firms in food sector, Open journal of accounting, 2(1), 19-25. htt://dx.doi.org/10.4236/ojacct.2013.22005.

Boateng, P. K. 2015. The impact of efficient inventory management on profitability: evidence from selected manufacturing firms in Ghana. http://mpra.ub.unimuenchen.de/67889/

Čambaliková, A. & Misun, J. 2017. The importance of control in managerial work.

Bufan, I. D.2013. The role of budgeting in the management process: planning and control, SEA-Practical application of science, 1(1), 1–22.

Dedeckova, N. 2020. Control, controlling and its objectives in the organisation. Educational and Psychological Measurement

Evans 2020. Are profit and profitability the same thing?

Glasow, P. A. 2005. Fundamentals of Survey Research Methodology. Retrieved March 1, https://doi.org/10.2471/BLT.20.276782

Ibinwangi, O. J. 2019. Planning as a management function in business organisations, African business and finance journal, 4(3), 3–13. https://www.researchgate.net/publication/337893323.

Ibrahim, U. A. & Mustapha, M. A. (2019). Impact of financial control mechanisms on profitability performance: A case of manufacturing firms in Nigeria, *International journal of managerial studies and research* (IJMSR), 7(3), 1-10. http://dx.doi.org/10.20431/2349-0349.0703001.

Juneja, P. 2015. Functions of management–planning, organising, staffing, directing & controlling.

Krejcie, R.V., & Morgan, D. W. 1970. Determining Sample Size for Research Activities.

Lloyd, R. & Aho, W. 2020. The four functions of management – an essential guide to managementprinciples. Management open educational resources. https://scholars.fhsu.edu/management_owr/1.

McNamara, D. E. 2009. From Fayols mechanistic to today's organic functions of management. American journal of business education (AJBE), 2(1), 63–78. https://doi.org/10.19030/ajbe.v2i1.4023.

Nanda, S. & Panda, A. 2017. The determinants of corporate profitability; an investigation of Indian manufacturing firms, international journal of emerging markets, 13(2), 68-81. DOI:101.1108/IJoEM-01-2017-0013.

Ojua, M. O. 2016. The importance of budget and budgetary process among non-publicly accountable entities (NPAEs): A survey of micro sized firms in Nigeria, *International Journal of Business and management,* 4(7), 305–312.

Siyanbola, T. T. & Raji, G. M. 2013. The impact of cost control on manufacturing industries' profitability, *International journal of management and social sciences research*, 2(4).

Siyanbola, T. T. 2013. The Impact of budgeting and budgetary control on the performance of manufacturing company in Nigeria, *Journal of business management & social sciences research*, 2(12).

Stephen, J. C. & Dennis, J. G. 2017. The classical management functions: Are they really outdated? https://doi.org/10.5465/ambpp.1984.4978715.

Dodoo, R. N. A., Appiah, M. & Donkor, D. T. 2020. Examining the factors that influence firm performance in Ghana: a GMM and

OLS approach. *National accounting review*, 2(3), 309–323. DOI: 10.3934/NAR. 2020018.

Gatsi, J. G., Gadzo, S. G. & Kportorgbi, H. K. 2013. The effect of corporate income tax on financial performance of listed manufacturing firms in Ghana. *Research journal of finance and axxounting,* 4(15), 222–284.

Osei, A. E. 2017. The impact of manufacturing industries on Ghana's economy. International journal of research studies in management, 6(2), 73–94. DOI: 10.5861/ijrsm.2017.2003.

Sampene, A. K., Agyeman, F. O., Robert, B., Wiredu, J., Moses, S., Nicholas, L., & Salomon, A. A. 2021. *A Study of Small and Medium-Enterprises in Ghana : Entrepreneurial Outlook. 2020*, 185–200.

Wiredu, J. 2024. Exploring Sustainable Supply Chain Management Practice and Environmental Performance: A Systematic Review Perspective. *Universal Journal of Carbon Research*, 1–18.

Wiredu, J., Bo, Y., Labaran, U. I., & Georgine, F. 2021. The Effect of the Adoption of ICT on the Monetary Performance of Rural Banks in Ghana: A Case Study of Chosen Rural Banks in Eastern Region. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, *Vol. 8*(Issue 1), pp: (230-237). https://doi.org/www.paperpublications.org

Wiredu, J., Bo, Y., Yang, Q., & Agyemang, S. A. 2021. Customer Satisfaction on the Impact of ICT Based Products on Rural Banks: A Case Study of Anyinam-Rural Bank Limited in Ghana. *Journal of Business*, *9*(4), 192–204.

Wiredu, J., Labaran, U. I., Nketiah, E., & Osibo, B. K. 2020. The Impact of Information and Communication Technology (ICT) on Rural Banks Management. A Case Study of Atiwa-Rural Bank Limited in Ghana. *American Journal of Industrial and Business Management*, *10*(10), 1681.

Wiredu, J., Nketiah, E., & Adjei, M. 2020. The relationship between trade openness, foreign direct investment and economic growth in West Africa: Static panel data model. *Journal of Human Resource and Sustainability Studies*, *8*(1), 18–34.

Wiredu, J., Otoo, P., & Yang, Q. 2021. THE INFLUENCE OF DELEGATION ON EMPLOYEES'PERFORMANCE: A CASE STUDY AT KOFORIDUA MUNICIPAL ASSEMBLY-GHANA. *International Journal of Economics, Commerce and Management*, *Vol. IX,*(Issue 10, Oct 2021), Page 1. https://doi.org/http://ijecm.co.uk/

Wiredu, J., Yang, Q., Inuwa, U. L., & Sampene, A. K. 2023. Energy transition in Africa: The role of human capital, financial development, economic development, and carbon emissions. *Environmental Science & Policy*, *146*, 24–36.

Wiredu, J., Yang, Q., Otoo, P., & Igbonaju, J. O. 2021. The Impact of Potency on Feminine Workforce Involvement in West Africa. Evidence from Countries in West Africa. *Journal of Business*, *9*(3), 114–122.

Wiredu, J., Yang, Q., Saljoughipour, S., Olufunke, E. C., Sampene, A. K., & Brenya, R. 2023. Stimulating environmental performance through green human resource practice: Does green transformational leadership matter? *Journal of Infrastructure, Policy and Development*, *7*(1), 2127.

Wiredu, J., Yang, Q., Sampene, A. K., Gyamfi, B. A.,& Asongu, S. A. 2023. The effect of green supply chain management practices on corporate environmental performance: Does supply chain competitive advantage matter? *Business Strategy and the Environment*.

Wiredu, J., Yang, Q., Sampene, A. K., Shams, F. K., Nishimwe, A., Agyeman, F. O., & Awuah, A. 2022. Key Barriers for Bioenergy Projects Implementation: A fresh insight from Ghana. *Int. J. Sci. Manag. Res*, *5*, 237–256.

Sulaymonov, A.2018. Importance of budgeting and its role in strategic management accounting.

Wimmer, R. D., & Dominick, J. R. 2013. Mass media research. Cengage learning.

****