

Budgeting and Its Effect on the Financial Performance of Listed Manufacturing Firms: Evidence from Manufacturing Firms Listed on Ghana Stock Exchange

Wonder Agbenyo* Frank Osei Danquah Wang Shuangshuang College of Economics and Management, Sichuan Agricultural University, Chengdu 611130, China

Abstract

Organizations in both developed and developing countries face high competitions in the business sector. It is essential that businesses that want to remain competitive develop the desire of identifying the role of budgeting and its effect on their financial performance. In this regard, this study explored the role of budgeting and its effect on financial performance of listed manufacturing firms on the Ghana Stock Exchange as a case study. Specifically, the study sought to examine the role of budgeting and to analyze the impact of budgeting on the financial performance of these firms. Both cross-sectional and convenient sampling techniques were used to select fifty-one (51) respondents as the sample size of the study. Questionnaires were used to obtain data from the respondents. The correlation matrix was used to establish a positive relationship between budgeting and financial performance. The study discovered that budgeting plays imperative roles in the financial performance of listed manufacturing firms. The study again unveiled that there is a strong positive correlation between budgeting and financial performance. The study also concludes that planning; monitoring and control; coordination and evaluation plays a vital role and has a positive effect on the financial performance of manufacturing firms. The study recommends that managers must produce comprehensive budgetary plans to enable the employment of long-term plans. Annual budgeting review must also be incorporated permanently to enable the manufacturing firms to identify key financial indicators for their business and how and when to monitor them and to plan for future operations, refine existing strategic plans and considers how they can respond to current competitions.

Keywords: Budgeting, Financial Performance, Manufacturing Firms, Ghana Stock Exchange

1. Introduction

In recent times, organizations in both developed and developing countries face high competition in the business sector. However, this is more severe in developing countries such as Ghana than developed countries. With respect to financial management systems, including budgeting, cost allocation techniques, financial reporting systems and others have come under countless investigation. According to Pimpong and Laryea (2016), this has attracted the attention of scholars on the subject of financial performance in the various areas of business and strategic management. It is imperative that businesses that want to remain competitive especially in developing countries such as Ghana need to have excellent control over their costs (Marginson, 2013). Koech (2015) also noted in his studies that one of the most drastically affected sides of organizations is the budget and budgetary control. It is indisputable that for any organization that wants to survive in the recent competition within the business sector need sharp tools and proven management strategies to forecast and determine the significant changes which are probably going to influence the business while they choose future direction and dimension of resources needed to ascertain the stated goals of the organization. Most organizations adopt new management tools with the desire to enhance their management and budget process. Jones and Pendlebury (2000) in concordant indicated that budgetary control is a demonstrated management tool that helps private firm's management and enhances the improved performance of any economy in various ways.

Most manufacturing companies have performed poorly in Ghana due to challenges such as, competition from imported goods, low purchasing power and lack of market, depreciation of the country's currency, poor power supply and high cost of raw materials, high utility prices and cost of credit and access to credit and above all lack of effective and efficient budgets, and budgetary control systems to adequately and judiciously allocate resources to meet organizational goals, and maximize performance. Boquist (2001) conducted a study and found out that organizations continue to perform poorly because they lack effective budgetary planning which most of these companies are blind to. Most organizations ranging from small-scale businesses to large scale businesses, fail to recognize the influence of budgets and budgetary control over performance outcomes. These organizations go ahead without paying more attention to improving their performances through their budgets (Koech, 2015).

As a result of the above, most scholars have developed the interest in the studying of budgeting and its impact on financial performance. For instance, Zimmerman (2003) observes that budgeting enables harmonization of sales and production, formulation of a lucrative sales and production program, coordination of sales and production with finances and coordination of all operations within the business. While this is so, the manufacturing sector has failed to enjoy these benefits fully as a result of the failure in effective planning and



employment of the budgets. In a similar study by Kipkemboi (2013) on the effect of budgetary control on the performance of non-governmental organizations (NGOs) in Kenya. His study established that there is a low positive relationship between budgetary controls and performance. Diamond and Khemani (2006) also studied accounting systems among businesses in the developing countries. He focused mainly on the effect of budgeting processes on the financial performance of commercial profit-making firms. Chidi and Shadara (2011) studied the effect of budgetary process on financial performance. Previous studies have also focused on budgetary process and financial performance of commercial businesses in developed countries leaving a gap of literature on the effect of budgeting and its effects on the financial performance of manufacturing firms in developing countries specifically Ghana. Emanating from the above discussion, this paper seeks to bridge this gap in knowledge by examining the impact of budgeting and its effect on the financial performance of manufacturing firms listed on Ghana Stock Exchange.

1.1 Objectives of the Study

The main objective of the study is to investigate the impact of budgeting and its effect on the performance of manufacturing firms listed on Ghana Stock Exchange. The specific objectives were deduced. Thus to;

- Examine the roles of budgeting in manufacturing firms in Ghana.
- Ascertain the effect of budgeting on financial performance of manufacturing firms in Ghana.

2. Review of Related Literature

2.1 Stakeholder Theory

Stakeholder theory was first depicted by Dr. F. Edward Freeman, an educator at the University of Virginia, in his milestone book, "Strategic Management: A Stakeholder Approach." In this book he proposes that investors are simply one of numerous stakeholders in an organization. Stakeholder theory has invaded the scholarly dialogue in management and a wide exhibit of controls, for example, health care, law, and public policy (Freeman, Harrison, Wicks, Parmar & de Colle, 2010). A focal start of a significant part of the writing on stakeholder theory is the concentration on stakeholders, particularly treating them well and working for their interests, enables a firm to make an incentive along various measurements and is in this manner useful for firm performance (Donaldson & Preston, 1995; Freeman, 1994; Freeman, Harrison & Wicks, 2007; Harrison, Bosse & Phillips, 2010). Financial performance is imperative to a lot of company's stakeholders, yet it is not the main part of value that is critical to stakeholders. Consistent with Freeman's (1994) major thought that a firm should serve different stakeholders, firm performance may be characterized as "the total value made by the firm through its activities, which is the entirety of the utility made for every one of an organization's legitimate stakeholders". It is undisputable that with manufacturing firms the high level of detail in budgeting is very important and influential. Manufacturing firms specifically utilize 75 percent to 95 percent of their total controlling ability to operational planning amid the time they are occupied with budgeting (Kopp & Leyk, 2004) tragically top management at times considers the high cost included in respect to the supervisor advantage got from such comprehensive instruments. It is not obvious that cost, product and key controlling frequently get little consideration in the process.

2.2 Ghanaian Manufacturing Firms and the Ghanaian Economy

The manufacturing sector is one of the imperative sectors of the Ghanaian economy. However, in the 1960's much attention was not given to this particular sector. Nevertheless, from 1990 to date Ghana's economic growth has been among the fastest growing economy in Africa and quicker than in some high venture emerging market economies (Addo, 2017). Addo, (2017) further portrayed that the economy of Ghana has encountered direct yet predictable development in the course of recent years, with development rate in the vicinity of 1990 and 2010 averaging 5 percent. Industry in Ghana represents around 25.3% of total GDP. Ghana's industrial production is increasing at a 7.8% rate, identifying her as the 38th speediest rising industrial production in the world because of government industrialization strategies (Addo, 2017). However, the manufacturing sector is beginning to face difficulties recently in times as indicated by the Association of Ghana Industries (AGI) indicator report, rivalry from imported goods is the least challenge faced by Ghanaian businesses in the manufacturing sector. The sector throughout the years has needed to fight with products from their partners somewhere else from around the world however it shows up this is no more a wellspring of stress in any event for the last quarter of last year. Likewise, low purchasing power and absence of market, depreciation of the country's currency (cedi), brought down production of foods and drinks, refined oil-based commodities, and fabricate of paper and paper products, increments in taxes hit the sector hard prompting abnormal state of tax collection, Poor power supply and high cost of crude materials, high utility costs and cost of credit and access to credit were different issues or difficulties that face the manufacturing sector. In the mist of these challenges when manufacturing firms do not consider a strategic budget to run operations, most firms will exit the market. This paper portrayed in its findings that the manufacturing sector needs to produce a comprehensive budgetary plan to enable the employment of the



long-term plans and that annual budgeting review must be incorporated always to enable management to identify key financial indicators for the firm and how and when to monitor them to plan for future operations, refine existing strategic plans and considers how they can respond to changing circumstances such as the current issues that the economy is battling with.

2.3 Essence of Budgeting on the Performance of Listed Manufacturing Firms in Ghana

Budgeting can be considered as planning since it forecasts the future of events and how activities should be handled. Every organization whether small or big needs a plan or a budget to help it excel. It will be eerie especially for manufacturing firms without a budget. Horngren and Harrison (2008), characterize budget as a quantitative articulation of an arrangement of activity. Atkinson et al. (1997), additionally characterize budget as a quantitative articulation of the cash inflows and outflows to decide if a budgetary plan will meet organization objectives. In the perspectives of Tumwine et al (2014), who characterized budget as a plan of action communicated in quantitative terms. It is a financial and or quantitative statement arranged and endorsed before a defined timeframe for achieving a given organizational target. From the perspective of the scholars it implies that a budget is additionally not only a quantitative expression of a plan of action but a quantitative economic plan. It can equally be attributed that literature posits that a budget is a quantitative expression of a plan of action prepared ahead of time of the budget time frame.

Emanating from the above scholars, it is proofed that budgeting is as urgent as money itself and any burglary, waste, excessive use or stock out could lead to poor performance of any organization. Hence, Koech (2015) in his study express that organization ought to be managed adequately and productively to accomplish its objectives. The future of budgeting lies in making arrangements for value. Budgeting and financial performance are key financial procedures in the manufacturing sector. The most effective method to enhance organization's financial performance is an issue that worries every manager in every manufacturing business. The budgeting procedure in manufacturing firms consolidates a strategy in financial welfare. For example, it shows how cash is appropriated by the management to the distinctive offices and key areas to focus on. This helps the management in planning and anticipating in order to decrease the costs and redundant spending. This likewise empowers the organization to satisfy its obligations if any and to guarantee the organizations long-term technical and financial suitability (Gachithi, 2010). In this context, it is, therefore, a necessity for all manufacturing companies in Ghana to embrace budgeting to enhance their operations and financial performance in particular.

2.4 Financial Performance

The subject of financial performance has gotten significant consideration from researchers in different regions of business and strategic management. It has additionally been the essential worry of business experts in a wide range of organization since financial performance has an effect on an organization's wellbeing and at last its survival (Onduso, 2013). Financial performance is the degree to which financial goals are being or has been achieved (Pimpong & Laryea, 2016). However, budgeting at the early stage of its development was concerned with preparing and to permit correct performance evaluation and consequently rewards. Finance is continually being ignored in financial decision making since it includes venture and financing in here and now period. Further, likewise go about as a control in financial performance, since it does not add to return on equity (Rafuse, 1996). A very much composed and executed financial management is relied upon to contribute confidently to the formation of a firm's values and beliefs (Padachi, 2006). Broad writings with respect to the company's goals put much stress on the maximization of investor's wealth. Managers are in this manner worried about augmenting investor's wealth as it means future prospects, reflects the relentless development and gives a risk shield. In order to achieve this, Naser and Mokhtar (2004), argue that high performance reflects administration adequacy and efficiently making utilization of organization's assets. A worthy budget will give birth to adequacy and efficient utilization of the firm's assets.

2.5 Recent Empirical Reviews

Qi, (2010) researched on the impact of budgeting process on performance of small and medium-sized firms in China. What she discovered, from the OLS regression output is that, there is a significant and positive relationship between formal budgeting process and firm performance and that formal budgetary control cannot be said to have a much stronger impact on profits than on sales revenue. That is, there is a stronger relationship between formal budgetary control and sales revenue than on profits.

Player (2010) investigated on how budgeting affects the performance of SMEs in China. He reviewed the budgeting process in business firms and performance measurement in SMEs and found out that more formal budgeting planning stimulates greater growth of sales returns in SMEs, clear and difficult budget goals improve budgetary performance of institutions, a higher level of budgetary complexity results in a lower profit growth of SMEs, more formal budgetary control leads to a higher growth of profit in the organisations and a greater budgetary involvement leads to better managerial performance. Medium-sized firms achieve higher profit



growth than small firms and state-owned enterprises achieve better non-financial performance than small firms.

Onduso, (2013) conducted a research on the effects of budgets on financial performance of manufacturing companies in Nairobi County. The study used both primary and secondary data. A statistical package for social sciences was used as analyzing tool and also regression model was adopted to determine the association between dependent and independent variables. His findings revealed that, financial performance as measured by ROA is influenced by the use of budgets and influences of management. The research also revealed that, the qualifications of those employed to overlook the activities of the firm was not good and hence firms had to employ people from outside to help in the preparation of budgets.

Mbugua, (2013) studying a sample of 60 companies using a cross-sectional research design concluded that aspects of budgeting practices such as budget planning and budgetary participation have a positively significant effect on the revenue collection efficiency of water service providers while budget control practices and budgeting approach have no significant effect on revenue collection in the studied industry.

Mwangi, (2014) in assessing the effects of budgetary planning tools on the financial performance of registered public service vehicle companies in Kenya brought to light that, vehicle companies that adopted budgetary planning techniques had favorable performance ratios and those that did not practice those techniques had unfavorable performance ratios. The paper also revealed that most people in the industry were not aware of such techniques and even those who were aware did not use them effectively.

Koech, (2015) assessed the effect of budgetary control on the financial performance of selected manufacturing companies in Kenya. A descriptive research design and stratified sampling technique was used. In his study, 10 largest companies from each subgroup of the manufacturing companies were selected. The respondents were the head of the finance department or an equivalent. Hence the sample size was 50 respondents. He used both primary and secondary data and used a descriptive analysis to mainly summarize the data collected. His results showed that there is a significant relationship between financial performance in manufacturing companies and the three variables (planning, monitoring and control and participative budgeting) was henceforth obtained.

Pimpong, and Laryea, (2016) wrote a paper in the International Journal of Academic Research and Reflections about budgeting and its impact on financial performance of non-bank financial institutions in Ghana. Their findings revealed that, there is a positive relationship between budgeting and firm performance. The further portrayed that, the firms made use of established budget processes to a greater extent and that budgeting coordination has a statistically moderate positive relationship on firm performance.

3. Study Methodology

3.1 Research Design

The study employed a cross sectional research design to access the impact of budgeting on the financial performance of listed manufacturing firms in Ghana. A cross sectional is a study design that is conducted within a short period at a particular point in time. This method assisted the researchers to study the characteristics of interest at a particular point in time (Olsen & St George, 2004).

3.2 Population and Sample Size of the Study

Saunders (2011) indicates that population of a study is the full set of cases from which a sample is taken. The population of the study comprised all the listed manufacturing firms on the Ghana Stock Exchange. As it is often impossible and generally accepted that the entire population of a study cannot be studied. In this regard, the researchers used both purposive and convenient sampling techniques to select fifty-one (51) respondents as the sample size of the study.

3.3 Data Source and Method of Data Collection

Primary data was the main source of data collection for the study. A comprehensive questionnaire designed to cover the objectives of the study was used to collect the data. The questionnaire was structured into four sections. The first section A sought to obtain demographics data about the respondents. Section B of the questionnaire focuses on the roles of budgeting. The third section examines the budgeting processes in the listed manufacturing firms. The final section was to assess the financial performances of the listed manufacturing firms. Questionnaire was used to obtain data from the employees of 11 manufacturing firms listed on the Ghana Stock Exchange namely; Ayton Drugs Manufacturing Company Ltd, Guinness Ghana Breweries Ltd, Fan Milk Limited, Pz Cussons Ghana Ltd, Unilever Ghana Limited, African Champion Industries Ltd, Aluworks Ltd, Camelot Ghana Ltd, Comet Properties Ltd, Pioneer Kitchenware Ltd and Starwin Products Limited.

3.4 Methods of Data Analysis

The questionnaires, which were answered by the respondents were tabulated and data analyzed by using descriptive, inferential and quantitative analytical techniques with estimations from the Gnu Regression,



Econometrics and Time-series Library (gretl) software. Statistical tools such as frequency distribution tables were employed in analyzing the questionnaire. This study employed the ordinary least squares multiple regression econometric model in estimating the study. The multiple regression model is specified as follows:

$$FP = \alpha + \beta_1 P + \beta_2 MC + \beta_3 C + \beta_4 E + \varepsilon$$

$$for \beta_i > 0$$

Where FP indicates Financial Performance of listed manufacturing firms; P represents planning as a variable of budget process, MC denotes the monitory and control as an element of the budget process, C also represents the coordination of budget process, and E is the evaluation element of budget process.

 β_i represents the coefficients of the independent variables, and α is the constant term and the ε explains the error term of the model.

4. Empirical Results and Discussions

4.1 Socio-Economic Demographic Characteristics of Respondent's

The socio-economic demographic characteristics of the respondents are summarized in Table 1.

4.1.1 Gender of Respondents

Out of the 51 sample size, the statistics shown in table 4.1 below indicates that 35% of the respondents were females as against 65% of males. This indicates men dominate the manufacturing firms as compared to women.

4.1.2 Educational Background of Respondents

The study explored the educational background of respondents and out of 51 respondents' sampled, table 4.1 below identified majority of 45% respondent's as master degree graduates. Other certificate holders followed with 37% and respondents with first degree certificate were 18%. This result indicates that there are more educated workers in the manufacturing sector.

4.1.3 Experience of Respondents in the firm

Out of the 51 respondents, 14% of respondents indicated that they have been working with the firm for the past 10 years and same to those less than a year. 39% of another group indicated that have been working with the firm between 1-4 years whilst 33% of the rest respondents claimed to have been in business for 5-10 years. Refer to Table 1 below.

4.1.4 Position of Respondents in the organization

With regards to the position of respondents, it was deduce that respondents who occupied the positions of human resources manager, finance officer, production manager and marketing office all have equal percentage of 17.6% each. It was also revealed from figure 4.3 below respondents that occupied the position of research and development are only 13.7% and 15.7% of the respondents also occupied the position of information and technology officer. Refer to Table 1 below.

4.1.5 Number of Years that the firm operate

With respect to the 51 respondents, 2% of respondents indicated that the firm have been in operation between 1-4years now. 39% of another group indicated that the firm have been operating between 5-10 years whilst 59% of the respondents claimed that the firm have been in business for over 10 years. Refer to Table 1 below.

4.1.6 Time dimensions of budget cover

With regards to the time dimensions of overall firm budget cover in years, it was deduce that 4% of the respondents claimed that the overall budget cover is less than 1 year. It was also revealed from figure 4.6 below that 51% of respondents expressed that budget cover 5 years and above. Majority of the respondents (57%) indicated that the budget covers between 1-5 years. Refer to Table 1 below.

4.1.7 How often the Budget has been reviewed

The study investigated how often the listed manufacturing firms review their budgets. Out of 51 respondents' sampled, table 4.1 below identified majority of 37.3% respondents were of the view that the firm reviews its budget quarterly. 35.3% respondents of indicated that the firm reviews it annually. Also, 25.5% respondents revealed that the firm reviews its budget monthly and surprisingly 2% of the respondents admitted that the does not review its budget at all. Refer to Table 1 below.



Table 1: Socio-economic Demographic Characteristics of Respondents

		N	%
Gender	Female	18	35.3
	Male	33	64.7
	Total	51	100
Level of Education	BSc. Degree	9	17.6
	Masters	23	45.1
	Others	19	37.3
	Total	51	100.0
	less than 1yr	7	13.7
Working Experience	1-4yrs	20	39.2
3 1	5-10yrs	17	33.3
	over 10yrs	7	13.7
	Total	51	100.0
	Human Resource Manager	9	17.6
	Finance Officer	9	17.6
	Production Manager	9	17.6
Position	Research Development	7	13.7
	Information Technology Officer	8	15.7
	Marketing Officer	9	17.6
	Total	51	100.0
	1-4yrs	1	2.0
Number of Years in	5-10yrs	20	39.2
Operation	over 10yrs	30	58.8
	Total	51	100.0
	1-4yrs	2	3.9
Time dimensions of overal	5-10yrs	29	56.9
oudget cover	over 10yrs	20	39.2
Ö	Total	51	100.0
	Monthly	13	25.5
	Quarterly	19	37.3
How often is it reviewed?	Annually	18	35.3
	None	1	2.0
	Total	51	100.0

Source: Researcher's Field Data, 2018

4.2 The Role of Budgeting among Listed Manufacturing Firms in Ghana

The study investigated the roles of budgeting among listed manufacturing firms in Ghana. With regards to this effect, respondents were questioned to rate on weighting levels which are strongly agree, agree, neutral, disagree, and strongly disagree, for each statement. Conferring to the collected data, Frequency count for each attitudinal level and Mean (X) were analyzed by using Predictive Analytical software version 22 (PASW). The statistical analysis results from Table 4.1 presents responses on the roles of budgeting. It has been deduce that budgeting helps integrate the organization's strategic planning with budgets and processes of cost control (X =1.69) implying that most of the respondents indicated that budgeting helps to integrate the organization's strategic planning with budgets and processes of cost control, whereas a minute (SD= 0.583) disagree with the statement. Also, respondents with a whooping mean of 1.76 admitted to the fact that budgeting helps identify financial skills required for better decision making within the manufacturing firm whereas a small portion (SD=0.642) disagree. The respondents also highly agreed (X = 1.90) to the fact that budgeting enables management to identify key financial indicators for the business and how and when to monitor them whereas a small portion (SD=0.806) disagree. Respondents further recognized (X = 1.71) the fact that budgeting also economizes management time by using the management by exceptional principle. The statement as to whether the budget is an essential tool to translate general plans into specific, action-oriented goals and objectives or not, most of the respondents (X = 1.73) agreed to the statement. Finally, as to whether the budget provides the benchmarks against which to judge success or failure in reaching goals and facilitates timely corrective measures, majority of them indicated that the budget provides the benchmarks against which to judge success or failure in reaching goals and facilitates timely corrective measures (X = 1.67). The study affirmed that all the



responses were found to be significant at 5% significant level.

Table 2: Roles of Budgeting in listed Manufacturing firms

		95% Confidence Interval			
	Mean	Lower	Upper		
Roles of Budgeting in Listed Manufacturing firms					
 budgeting helps integrate the organization's strategic planning with budg and processes of cost control 	ets 1.69	1.51	1.86		
 budgeting helps identify financial skills required for better decision makin 	g 1.78	1.61	1.96		
 it enables management to identify key financial indicators for the busin and how 	ess 1.90	1.69	2.12		
 budgeting also economizes management time by using the management exceptional principle 	by 1.71	1.51	1.90		
 the budget is an essential tool to translate general plans into specific, action oriented goals and objectives 	on- 1.73	1.59	1.86		
 the budget provides the benchmarks against which to judge success or fail in reaching goals and facilities timely corrective measures 	1.67	1.49	1.86		

Scale: 1=Strongly Agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly Disagree

Source: Researcher's survey, 2018

4.3 Multiple Regression Results and Analysis

The multiple regression was used to investigate the effect of budgeting on the financial performance of listed manufacturing firms on Ghana Stock Exchange. The study employed the ordinary least squares multiple regression econometric model in estimating the effect. The results presented in Table 3 below displays the effects of budgeting process on the financial performance of the listed manufacturing firms in Ghana.

From the results of the multiple linear regression, the coefficient of determination R² (0.989) indicates that 98.9% of the variations in the dependent variable (financial performance) is explained jointly by the independent variables (planning; monitoring and control; coordination and evaluation). The study found that planning as a budgeting process has a positive influence on the financial performance of listed manufacturing firms in Ghana but is not statistically significant. This could be that there is weakness in the planning process of the listed manufacturing firms. However, from Table 4 below, it is evidence that planning as a budgeting process have a strong positive relationship with financial performance. It is therefore alleged that planning have an influence on the financial performance of listed manufacturing firms. Also, the study portrayed that monitoring and control as a budget process has a significant and positive influence on the financial performance of listed manufacturing firms in Ghana. This result was found significant at 1%. With its coefficient of 0.330, a 1% improvement in monitoring and control of effective budgeting will result in 0.33% improvement in the financial performance of manufacturing firms. This implies that monitoring and control of budgeting process is a significant determinant of financial performance.

The study further revealed that with a unit increase in coordination will cause the financial performance of manufacturing firms to improve by 0.32%, holding all the other factors constant. This result indicates that there is sufficient evident to suggest that the coefficient of coordination is significant in predicting the financial performance of listed manufacturing firms. Finally, the study asserted that evaluation as a budget process has a significant and positive influence on the financial performance of listed manufacturing firms in Ghana. This result was found significant at 1%. With its coefficient of 0.423, a 1% improvement in evaluation of effective budgeting will result in 0.42% improvement in the financial performance. This implies that evaluation of budgeting process is a significant determinant of financial performance among listed manufacturing firms.



Table 3: Multiple Regression Results

Model 1: OLS Dependent variable: FP

		Coefficient	Std. Error	t-ratio	p-value
	Const	0.481432	0.163849	2.938	0.0052***
	Planning	0.0893418	0.0818855	1.091	0.2811
	Monitory	0.330439	0.0991602	3.332	0.0017***
	and control	0.317396	0.0886376	3.581	0.0008***
	Coordination	0.423357	0.111254	3.805	0.0004***
	Evaluation				
Mean dependent var		10.02000	S.D. dependent var		3.588474
Sum squared resid		6.914027	S.E. of regression		0.391976
R-squared		0.989042	Adjusted R-squared		0.988068
F(6, 43)		1015.435	P-value(F)		1.82e-43
Log-likelihood		-21.48516	Akaike criterion		52.97031
Schwarz criterion		62.53043	1	Hannan-	56.61086
				Quinn	

Note: Dependent Variable: FP *** 1% significant level

Source: Researcher's survey, 2018

4.4 Analysis of Variance (ANOVA)

This analysis was done to determine the fitness of the regression model using the F-Statistic, and the results for the analysis of variance are presented in Table 4.3.

Table 4 Results for the Analysis of Variance

	Sum of squares	Degree of freedom	Mean square
Regression	624.066	4	156.016
Residual	6.91403	45	0.153645
Total	630.98	49	12.8771

 $R^2 = 624.066 / 630.98 = 0.989042$

F(4, 45) = 156.016 / 0.153645 = 1015.43 [p-value 1.82e-043]

Source: Researcher's survey, 2018 Hypothesis of testing the model fitness

 H_0 : The model does not fit well the dataset.

H_1 : The model fit well the dataset.

Considering the p-value (0.000) of the F-statistic (1015.43), the multiple regression was found to be significant at 5%. This implies that there is enough evidence to reject the null hypothesis that model is not well fit for the dataset; hence suggesting that the model best fit the dataset used in this study.

4.4 Empirical Relationship between Budgeting process and Financial Performance

The study further inquired the impacts of the various budgeting processes on the financial performance of the listed manufacturing firms. Table 4.4 presents the impact of the budgeting processes such as planning, monitoring and control, coordination, and evaluation on the financial performance of the listed manufacturing firms in Ghana. The testing of the relationship between planning, monitoring and control, coordination, and evaluation on the financial performance of the listed manufacturing firms in Ghana was done through the estimation of Pearson correlation coefficients. As evidence from the testing of the relationship from the table above it would be affirm that all the variables have the correlation coefficient above (r=0.970) and are all significant (Sig=0.000: p< 0.01) which implies that there is a strong positive relationship between the variables (planning, monitoring and control, coordination, and evaluation on the financial performance of the listed manufacturing firms in Ghana). The test portrays that the relationship between the variables is positive indicating that any 1% significant change positive or negative of planning, monitoring and control, coordination, and evaluation as budgeting process there will be corresponding 1% significant change in the financial performance of the listed manufacturing firms in Ghana.



Table 4.4: Relationship between Budgeting process and Financial Performance

	Planning	Monitoring and control	Coordination	Evaluation	Financial Performance
Planning	1				
Monitoring and Control	.985**	1			
Coordination	.972**	.975**	1		
Evaluation	.975**	.980**	.955**	1	
Financial Performance	.983**	.990**	.977**	.984**	1

Note: **. *Correlation is significant at the 0.01 level (2-tailed).*

Source: Field Survey, 2018

5. Discussions

The revealed that budgeting plays the following vital roles; it helps integrate the organization's strategic planning with budgets and processes of cost control, budgeting helps identify financial skills required for better decision making, it enables management to identify key financial indicators for the business and how and when to monitor them, budgeting also economizes management time by using the management by exceptional principle, the budget provides the benchmarks against which to judge success or failure in reaching goals and facilities timely corrective measures. This affirmation was based on the 5% significance level. This finding is in line with a recent study conducted by Harelimana, (2016) on "The Effect of Budgetary Control on the Financial Performance of Hotels in Rwanda": Case Study of Kigali Serena hotel. The study revealed that budgetary controls are viewed as imperative instrument in arranging and control of assets to upgrade execution in numerous associations.

The study further exposed that 0.989 percent variability of budgeting processes are explained by financial performance as supported by $R^2 = 0.902$. Based on the data obtained, and the findings stipulated, the study also revealed that planning; monitoring and control; coordination and evaluation plays a vital role and further has positive effect on financial performance of manufacturing firms. This finding also falls in line with a study conducted by Mwangi, (2014) on assessing the effects of budgetary planning tools on the financial performance of registered public service vehicle companies in Kenya. The study found out that, vehicle companies that adopted budgetary planning techniques had favorable performance ratios and those that did not practice those techniques had unfavorable performance ratios. The study also disclosed that, there is strong positive correlation between budgeting and financial performance. This finding is again in line with the following scholars; Qi, (2010) who investigated on the impact of budgeting process on performance of small and medium-sized firms in China. What she discovered, from the OLS regression output is that, there is a significant and positive relationship between formal budgeting process and firm performance. Pimpong, and Larvea, (2016) also wrote a paper in the International Journal of Academic Research and Reflections about budgeting and its impact on financial performance of non-bank financial institutions in Ghana. Their findings revealed that, there is a positive relationship between budgeting and firm performance. Koech, (2015) assessed the effect of budgetary control on the financial performance of selected manufacturing companies in Kenya. His results showed that there is a significant relationship between financial performance in manufacturing companies and the three variables (planning, monitoring and control and participative budgeting) was henceforth obtained.

6. Conclusion and Policy Recommendations

The study explored budgeting and its' effect on the financial performance of listed manufacturing firms on the Ghana Stock Exchange. Firms listed on the stock exchange contribute to the growth of the economy and therefore must be monitored to perform to expectation in order to enable the economy to grow. In this regard this study seeks to focus on the budgeting and its effect on financial performance of manufacturing firms. Based on the data obtained, and the findings stipulated The study also conclude that planning; monitoring and control; coordination and evaluation plays a vital role and further has positive effect on financial performance of manufacturing firms. The study again concludes that 0.989 percent variability of budgeting process is explained by financial performance as supported by $R^2 = 0.989$. The study again conclude that there is strong positive correlation between budgeting and financial performance.

The paper with respect to its findings suggested the following policy recommendations to the listed manufacturing firms; managers of the listed manufacturing firms should put in place an effecting planning system of budgeting since it is evidence that planning has a great positive impact on financial performance but was not significant which implies that there is weakness in the planning process of budgeting and must be given much attention. The study also recommends that managers produce comprehensive budgetary plans to enable the employment of the long term plans. Annual budgeting review must be incorporated always as found out in this



study that budgeting enables management to identify key financial indicators for the business and how and when to monitor them encourages managers to plan for future operations, refine existing strategic plans and considers how they can respond to changing circumstances. This will encourages managers to anticipate problems before they arise and ensures reasoned decision making. This study also acclaims that managers within the firms must have a perfect understanding of the role which they are prerequisite to play in ensuring budgetary compliance. This will ensure that the most appropriate individuals are made accountable for budget execution.

References

- Addo, E. O. (2017). The impact of manufacturing industries on Ghana's economy. International Journal, 6(2), 73-94.
- Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. Sloan management review, 38(3), 25.
- Boquist, H. (2001). The Impact of Human Resource Management Practices on Turnover, productivity and corporate financial performance. Academy of Management Journal, 635-672.
- Chidi, C. O., & Shadare, O. A. (2011). Managing human capital development in small and medium-sized enterprises for sustainable national development in Nigeria. International Journal of Management and Information Systems, 15(2), 95.
- Diamond, J., & Khemani, P. (2006). On the advice of foreign aid agencies to adopt IFMIS. IMF. paper, July.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. Academy of management Review, 20(1), 65-91.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. Business ethics quarterly, 409-421.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). Managing for stakeholders: Survival, reputation, and success. Yale University Press.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). Stakeholder theory: The state of the art. Cambridge University Press.
- Gachithi, E. (2010). The Challenges of budget implementation in Public Institutions: A case study of University of Nairobi. Unpublished MBA Project. University of Nairobi.
- Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. Strategic management journal, 31(1), 58-74.
- Horngren, C. T., & Harrison, W. T. (2008). Financial and managerial accounting. Pearson Education.
- Jones, R., & Pendlebury, M. (2000). Public sector accounting. Pearson Education.
- Kalule, J. (2016). Effect of budgetary control on the financial performance of selected government aided secondary schools in Kayunga town council, Uganda (Doctoral dissertation).
- Kipkemboi, S. (2013). Effect of Budgetary control on Performance of Non-Governmental Organizations in Kenya. Unpublished MBA Project, University of Nairobi
- Koech, G. M. (2015). The Effect of Budgetary Controls on Financial Performance of Manufacturing Companies in Kenya (Doctoral dissertation, School Of Business, University of Nairobi).
- Leyk, J., & Kopp, J. (2004). Effizient und effektiv planen und budgetieren, w: Beyond Budgeting umsetzen-Erfolgreich planen mit Advanced Budgeting. Horvath & Partners, Schaffer-Poeschel Verlag, Stuttgart.
- Marginson, D. (2013). Budgetary control. The Routledge Companion to Cost Management, 9.
- Mbugua, S. G. (2013). The Relationship between Budgeting Practices and Performance of Organizations in The Water Sector in Kenya (Doctoral dissertation, University of Nairobi).
- Mwangi, C. M. (2014). Assessment of Effects of Budgetary Planning Tools on the Financial Performance of Registered Public Service Vehicle Companies. A Case of Kisii County Kenya (Doctoral dissertation, Kisii University).
- Naser, K., & Mokhtar, M. (2004, July). Determinants of corporate performance of Malaysian companies. In Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, Singapore (Vol. 1, No. 1, pp. 16-25).
- Olsen, C., & St George, D. M. M. (2004). Cross-sectional study design and data analysis. College entrance examination board.
- Onduso, E. A. (2013). The effect of budgets on financial performance of manufacturing companies in Nairobi County. Unpublished MBA Thesis, University of Nairobi.
- Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. International Review of business research papers, 2(2), 45-58.
- Pimpong, S., & Laryea, H. (2016) Budgeting and Its Impact on Financial Performance: The Case of Non-Bank Financial Institutions in Ghana.
- Player, C. (2010). The Impact of the Budgeting Process on Performance in Small and Medium-Sized firms in China.



- Qi, Y. (2010). The Impact of the Budgetting Process on Performance in Small and Medium-sized Firms in China. Rafuse, M. E. (1996). Working capital management: an urgent need to refocus. Management Decision, 34(2), 59-63.
- Saunders, M. N. (2011). Research methods for business students, 5/e. Pearson Education India.
- Tumwine, S., Nasiima, S., & Kamukama, N. (2014). Human Capital Elements and their Influence on Perfromance Evidence from Ugandas Manufacturing Firms. Global Journal of Management and Business Research.
- Zimmerman, J. (2003). Accounting for Decision Making and Control, 4th Ed. New York, NY: McGraw-Hill, New York, NY.