DOES BUDGETING PROCESSES AFFECT FIRM FINANCIAL PERFORMANCE? EVIDENCE FROM TEA FACTORIES IN RIFT VALLEY REGION, KENYA

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Abstract
The tea sub-sector plays an importance role in the economy of the country through employment to many Kenyans both directly and indirectly and contributes over 26 percent of the total foreign exchange earnings according Kenya's Economic. Nevertheless, tea factories in Kenya have had many problems ranging from the high manufacturing costs and other operating costs together with the declining global tea prices due to oversupply of tea to the world market and this results to low returns to the farmers. The purpose of the research was to established the relationship between budgeting process (independent variable) and financial performance (dependent variable) of tea processing factories. The study employed correlational research design as it enabled establishment of relationship between variables. The census survey method was appropriate as the sample size was small. The study targeted all the KTDA parent tea factories in Kericho and Bomet counties with a sample of 96 respondents drawn from 7 factories. The study found that 80.8% of variations in financial performance was predicted by the dependent variables ($R^2 = 0.808$; $p<0.05$). Specifically, there was positive relationship between budgeting process variables (planning, monitoring and control and participative budgeting) and financial performance and as indicated by b=0.631($p<0.05$), b=0.631($p<0.05$) and b=0.631($p<0.05$) respectively. The equation Model $Y = \alpha + 63.1 X_1 + 50.2 X_2 + 69.5 X_3 + \varepsilon$ was therefore formulated. The research findings may be used by policy makers in emphasizing the importance of budgetary control on companies' performances. Equally, the findings may serve as a basis for further research in similar field.

Keywords: Budgeting processes, Financial Performance, Rift valley, Kenya

1. Introduction

1.1 Background of the study

Budgeting process involves budgeting and budgetary control. Budgeting is an estimates of revenue and expenditure of organizations and of persons for specified future period and helps

improve the growth of businesses through effective and efficient management of resources. Budgetary control in a management control tool used to monitor and control the firm's expenditure for a given period on the basis of predetermined targets and if there are any variations of actual with planned expenditure, corrective actions are taken.

Globally, organizations build up diversity of systems and strategies to facilitate the planning and controlling of activities. Budgeting is part of these systems which is mainly used by tea factories in setting their targets that guide the execution of their functions. The actual results are compared with the predetermined targets and corrective measures are taken where deviations are not favorable (Abdullahi *et al*., 2015). The tea production in Kenya is a major foreign exchange earner and thus a source of revenue to the government and the individual farmers in the tea growing areas (World Bank, 2013). In Kenya tea growing is practice in large scale and small scale (Kagira *et al*., 2012). The small scale tea farming is done by local farmers who are the shareholders of 54 factories and 15 satellite factories managed by Kenya Tea Development Agency (KTDA). The tea factories are owned by the farmers and collect green leaf and processed which are then marketed locally and internationally. The tea factories are faced with numerous problems ranging from the ever increasing labour costs, electricity and firewood costs and other production costs (Ongong'a & Ochieng,2013). The tea farming is also affected greatly by the farm inputs mainly fertilizers resulting in low returns to the farmers as the tea prices have been declining in the three consecutive years for instance in the year 2020 KTDA teas prices dropped to an average of USD 2.18 from USD 2.54 per kg recorded in 2019 (Business daily, Thursday 15 April 2021). The ever-increasing factory overheads which reduce payment to the farmers together with farm inputs such as fertilizers greatly affect the viability of tea farming (Kagira *et al*., 2012).

To mitigate on the production costs, other operating costs and the effect of declining tea prices an effective and efficient budgeting process for optimal allocation of limited resources need to be adopted by the tea factories as this may help improve their performance. Budgeting is applied by organizations as a way of planning for the future activities. They are made for critical functions of organizations such as purchases, sales, production, labour resources, cash flow projections giving a comprehensive detail plan covering a period of one year. Budgeting is used to in monitor and control the activities of organizations so as to minimize variances, costs and improve operational efficiency (Alesina & Perotti, 2014). This may assist in making decision on whether to change the approach of running the business activities, or even revised the budget if it becomes unachievable due to unfavorable conditions. Budget motivates the management of the organizations to align their interest to that of the owners of maximizing their wealth and the long-term growth of the business. The degree to which this is executed will mainly rely on how well the spending plans were done, most importantly whether it is a participative budget in which case the employees are the owners of the budget as they know the detail content of the budget and all will work towards accomplishing the set targets (Mulani *et al*., 2013).Kelly (2015) opined that an organization budget process act as a motivating factor to the employees by having the employees participate in the entire process so that the activities are executed in an efficient and effective manner. It is imperative for firms who desire to achieve a competitive advantage to

have an effective budgeting and budgetary control system over their operations (Chenhall & Langfield, 2014).

In budgeting, predetermined goals are set and outcomes measured and timely corrective actions are executed where deviations occur (Nwoye, 2015). The budget process starts by generating budget assumptions for the plan period. These assumptions are aligned to projected sales volume and value trends, the related cost centres with the anticipated changes in the economic environment and industry changes. The underlying assumptions which might affect the related operating expenses are also agreed. Budgets are prepared for all the respective units of the tea factories by the Factory unit manager and the Factory accountants which is then submitted to the KTDA for reviewed and approval by the Board of Directors. The budgets once approved are implemented by the respective factories. Therefore, budget plays a critical role in decision making in any of the factories and there are several types of budgets which form part of the overall budget which includes Capital, Production, Marketing, Sales and Cash budgets. Capital budgeting involves the allocation of resources to major capital assets which generate revenue to the company and usually requires large amount of funds. Capital investment need thorough analysis as it involves many other activities associated with the asset and its viability must be critically analyzed to avoid huge losses in future. The techniques such as net present value; payback period are used to evaluate the viability of such project. The capital investments are taken to improve the shareholders' value in the future and are normally funded from the internally generated funds which are cheaper source of funding or external financing from borrowings where internal funds are inadequate. The production budget involves making estimates for production of goods in a given period based on the projected sales volume for the same period.

Obwaya, (2011) studied the relationship between participatory budgeting and performance of local authorities in Kenya, with a case study of Nairobi City Council just before the implementation of County Governments in Kenya. The study was conducted through a survey study with population of 44 respondents selected from the employees of Nairobi city council. Data was complemented by secondary data from published reports as well as descriptive data and analyzed by multiple regression analysis. The study established a direct relationship between budget participation and performance with ($p \geq 0.05$). Further, the study found that, the indirect relationship between budget participation and performance running through job relevant information. The study therefore recommended that in order to avoid many obstructions, organizations should ensure that its budgetary participatory strategies are sufficient to enable budget implementation and management more efficient.

Budgetary control ascertained how well management of each tea factory have used the budget in monitoring and controlling the planned expenditures in the financial year. Budgetary control account for the revenue and expenses of different departments and each employee is held responsible for the various expenses incurred by those departments and each manager will be assessed based on its performance. A budgetary control system ensures that factories achieved results that are in compliance with the budgets (Kpedor, 2012). The analysis of budgets and

actualized amount assist managers of any tea factory to come up with any variances and take corrective actions so that planned objectives are realized.

The financial performance refers to the level of performance attained by a tea factory over a given period of time, expressed in terms of overall profits and losses during that time and usually assessed by use of ratios such as organization's liquidity ratios, efficiency ratios, profitability ratios, return on assets, and return on equity and leverages ratios. Performance gives an indication of the organization accomplishment of its objectives (Premchand, 2012). In the tea sector financial health status is of great significance as it enables tea factories to pay its creditors and other obligations as they fall due. This is in away confirms the importance of budgeting which enables organization to forecast on the future and improve financial performance. It is therefore imperative for the organization to use budgeting process to allocate its resources for optimal results which increases the shareholder's wealth. Such budgetary control needs to be effectively organized due limited resources required to generate profits (Kpedor, 2012). Financial performance is therefore vital for the survival of firms (Isaboke & Kwasira, 2016). It is measured by use of return on assets (ROA) and returns on equity (ROE) (Siyanbola, 2013).

1.2 Statement of the Problem

The tea sub-sector plays a key role in the social-economic development in the country. It is among the best sectors which contributes a lot to the Gross Domestic Product (GDP) and it accounts to over 26% of the overall foreign income according to Kenya's Economic Outlook,2018. Despite this, KTDA managed tea factories have recorded low returns in the past 3 years (KTDA report, 2021). The declined in tea prices together with high cost of production have resulted to low returns and greatly affected the economic activities in the tea growing regions since farmers depends mainly on income from tea production. To curb on the huge costs, the KTDA managed tea factories have instituted measures to improve on the production and operational efficiencies through tight budgeting and budgetary control for better financial performance. However, it is not clear whether these controls have yielded results owing to limited literature. Globally and locally, several research has been done on various fields on the effect of budgeting and budgetary controls on the financial performance and the scholars gave different findings depending on the independent variables chosen. From the literature reviewed, it was evident that budgeting process have an impact on an organizations performance. Therefore, there is need to establish the relationship between budgeting processes adopted by KTDA managed factories within Kericho and Bomet counties and their financial performance.

1.3 Hypotheses

The study was guided by the following hypotheses;

  i. **H_{01}: There is no relationship between budgeting process aspect of planning and financial performances in the selected tea factories.**

  ii. **H_{02}: There is no relationship between budgeting process aspect of budget participation and financial performance of the selected tea factories.**

iii. H_{03}: *There is no relationship between budgeting process aspect of monitoring and controlling and financial performance for the selected tea factories.*

2. Methodology

2.1 Research Design

According to Chinedum (2014), research design is a set of procedures or techniques for the collection, measurement and analysis of data to find solutions to research questions. Research design as a process of giving solutions to research problems being investigated in a study. Correlational research design was adopted in the study in order to examine the budgeting processes in the tea firms. The correlational research design is useful in ascertaining the extent to which two or more variables are associated. In measuring such association, correlation coefficient statistic was used to establish the strength of the relationship. Further, multiple regression analysis was adopted to ascertain the extent to which the independent variables predicted the dependent variable. Data was cross-sectional as it was collected relating to the variables at one point in time rather that longitudinal. The adopted research design allowed the researcher to collect both qualitative and quantitative data and apply both descriptive and inferential statistics in analysis.

2.2 Population and sampling procedures

According to Odoh and Chinedum (2014), target population refers to the whole group of persons in a particular place to which researcher has chosen to conduct a study and to make a conclusion on the basis of data collected to the entire group. Singh and Masuku (2013), explained population as the entire group of objects or persons to which a conclusion will be made based on research findings. In the case of this study the entire population of the rank of the factory unit managers, the factory accountants, the procurement managers, the plant engineers, the factory sales managers and their assistants, supervisors or equivalents from the selected tea factories were the respondents from all the 7 tea factories in the two counties. There were total of 96 employees in the mentioned categories n all the selected factories. Since the population of the study was fairly small and accessible the study adopted a sensus survey.

2.3 Data collection

Primary data was collected by use of self-administered questionnaire. Prior to actual data analysis, the questionnaire piloted with 10% of the target population size. The research instrument was scrutinized by panel of experts for consistency and validity. Reliability was ascertained by computing Conbach alpha coefficient. The items which did not meet the threshold of atleast 0.7 were droped from the questionnaire.

2.4 Data analysis

Data analysis is the collection and organizing of data for purposes of research (Johnston, 2014). Data which was collected by use of questionnaires was edified for completeness and consistency and analyzed using Statistical Package for Social Sciences (SPSS) version 26 computer

Packages. Inferential statistics applied were the correlation and regression analysis. Correlation analysis was applicable in the determination of the relationship between the variables while the linear regression analysis was used to determine the extent of associations between the independent variables (budgeting process) and the dependent variable (financial performance). The reason for selecting regression technique is that, regression will normally give better results in testing the correlation between two or more variables than other statistical methods.

The study will apply the following regression model

Model $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Given that Y = Firms performance, X_1 = Planning, X_2 = Monitoring and Control,

X_3 = Participative Budgeting, α = Constant, β = Coefficient of independent variables, and

ε = error term

3. Results

Correlation between variables is a measure of how well the variables are linearly related. The correlation coefficients results are between -1 and 1. A result of -1 means that there is a perfect negative correlation between the two values, while a result of 1 means that there is a perfect positive correlation between the two variables. Result of 0 means that there is no correlation between the two variables (Gujarat, 2004).

Pearson correlation coefficient was used to examine correlation between Planning, participative Budgeting, Monitoring and Control and Financial performance. The analysis is shown in the Table 1

Table 1: Correlations

		P	MC	PB	FP
P	Pearson Correlation	1			
	Sig. (2-tailed)	0.001			
MC	Pearson Correlation	.195**	1		
	Sig. (2-tailed)	.009			
PB	Pearson Correlation	.194**	.394**	1	
	Sig. (2-tailed)	.010	.000		
FP	Pearson Correlation	.315**	.221**	.439**	1
	Sig. (2-tailed)	.000	.003	.000	

**. Correlation is significant at the 0.05 level (2-tailed)., N = 78

P = Planning, MC= Monitoring and control, PB=Participative Budgeting, FP= Financial Performance

Source: Researcher (2021)

As shown in table 4.12 there was significant relationship between Planning and Financial performance since it had a Pearson Correlation of (r=0.315, p = 0.000), Monitoring and Control had a significant positive relationship with Financial performance delivery since it had a Person Correlation of (r =0.221, p = 0.003), Participative Budgeting had significant positive relationship

with financial performance since it had a Person Correlation of (r=0.439, P < 0.000). The correlation between the independent variables suggests absence of the existence of multicollinearity.

Table 2: Model Summary of Budgeting process and financial performance

Model	R	R^2	Adjusted R^2	Std. Error	Significance
1	0.899	0.808	0.788	0.137	0.000

Predictors: Budgetary Planning, Monitoring and control, Participatory budgeting
Dependent variable: Financial performance
N=78

Source: Survey Data, 2021

Table 2 shows results from the regression model summary used to establish the relationship between budgeting process and financial performance of selected tea processing factories. According to the results, R^2 value is 0.899 indicating that the independent variable explains 89.9% of the variation in the dependent variable and only 10.1% of the variation is explained by other factors which are beyond the scope of the study. These results are significant at 95% confidence level (p<0.05). The model also reveals a strong positive relationship between budgeting process and financial performance (R=0.899). The small shrinkage of only 0.02 (0.808-0.788) between the R squared and adjusted R – squared indicates that addition of variables in the regression model did not compromise the model fit. Field, (2010) suggests that such shrinkage should not exceed 0.075.

Table 3: Coefficients

Model Summary

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.i
	B	Std. Error	Beta		
(Constant)	0.438	1.305		8.072	0.000
Planning	0.631	0.037	0.353	6.512	0.000
Monitoring and Control	0.502	0.021	0.529	4.674	0.000
Participative Budgeting	0.695	0.026	0.238	5.066	0.000

Source: Researcher's Calculations from the Survey Data, 2021

Based on the results from the regression analysis, it was established that selected budgetary process on financial performance accounts to 99.9% of the variance in the financial performance. It can be deduced that planning have an impact on financial performance of selected tea estates as a unit increase in planning holding other factors constant would lead to an increase in financial performance by 0.631. Monitoring and control have a positive impact as frequent monitoring and

control have an impact on financial performance and a unit increase would lead an increase in financial performance by 0.502 holding other factors constant.

The results further show that participative budgeting improves financial performance of an organization and therefore an important aspect that organization should consider it crucial as a unit increase would result in an increase in financial performance by 0.695. This indicates that budgeting process variables have a positive effect on the financial performance of the tea processing factories. This finding was consistent with the findings of Obwaya, (2011) which established that the relationship between participatory budgeting and performance of local authorities in Kenya, was positive and significant. Further, the study found an indirect relationship between budget participation and performance running through job relevant information. The study therefore recommended that in order to avoid many obstructions, organizations should ensure that its budgetary participatory strategies are sufficient to enable budget implementation and management more efficient. The findings further shows that the t statistics for the variables t=6.512 for planning, t=4.674 for monitoring and control and t=5.066 for participative budgeting with all the t statistics being higher than 1.96 and p values of less than 0.05. This indicates the independent variables are statistically significant in influencing performances of the tea factories. The results were consistent with the findings by Maziriri (2017), Lius (2015), Maas et al., (2016) and Pimpong and Laryea (2016).

4. Discussion

Based on the findings, the study reached specific conclusions. First, following the finding that Decision making and accountability (measures of budgetary planning) had a positive significant relationship with financial performance implies that a unit increase financial performance can be enhanced by having a well-structured budgetary planning.

Secondly, the results for the second specific objective of this study on relationship between budgeting process aspect of budget participation and financial performance of selected tea factories in Kericho and Bomet counties showed that three variables were significant. The study hence concluded that participatory budgeting is an important predictor of successful budgeting hence improvement of firm performance. From this finding, the study further concluded that budget participation aspect such as training of employees, employee commitment and budget skills competency influences financial performance.

Regarding the third specific objective in which the study found that the relationship between budgeting process aspect of monitoring and control and financial performance of selected tea factories in Kericho and Bomet counties was positive and significant, the study concluded that frequency of monitoring and evaluation enhances firm performance. Therefore, in conclusion the estimated results of this study rejected the third null hypothesis that there was no relationship between budgeting process aspect of monitoring and controlling and financial performance for the selected tea factories

The following recommendation were made on the research findings and conclusions. Budgeting process aspect of planning of selected tea factories in Kericho and Bomet Counties have a

significant effect on financial performance. The study recommended that tea factories be empowered with the most efficient method of planning for effective budgeting. The empowerment on budgeting process should enable them identify issues that the organization should manage and help them adjust to improve the financial performance. It was recommended that tea factories to ensure budgetary control in their enterprises to improve financial performance in the organization. The tea factories should become more conscious on budgetary control through constant search for more effecting budgetary process relevant for the organization. It was also recommended that business mentorship should be carried out by relevant government ministries to enhance tea factories operators the capacity to use effective budgeting system to control their operations. Through stakeholders' involvement such as financial institutions to have capacity to foresee and overcome financial problems for effective performance in the business.

It was also recommended that tea factories be empowered to be able to keep proper records for performance appraisal both for financial and non-financial operations. Recommendation was made that tea factories be empowered through couching on performance measurement system for effective operations appraisals for effective financial performance. The study utilized correlational research design that was based on a KTDA factories. In future research, the use of panel models should be considered where panel data permits. Also, future study that explores other functional forms and compares the findings with those of this study would inform the growth of literature in the accounting and development economics.

Acknowledgments

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