THE EFFECT OF ADOPTION OF MANAGEMENT ACCOUNTING PRACTICES ON FINANCIAL PERFORMANCE OF COMMERCIAL PARASTATALS IN KENYA

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International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366

Received: 10th September 2020

Published: 25th September 2020

Full Length Research

Available Online at: http://www.iajournals.org/articles/iajef_v3_i6_119_130.pdf

Citation: Apunda, M. A. & Ndede, F. W. S. (2020). The effect of adoption of management accounting practices on financial performance of commercial parastatals in Kenya. *International Academic Journal of Economics and Finance, 3*(6), 119-130

ABSTRACT

Purpose: The main purpose of this study was to investigate the effect of adopting management accounting practices on financial performance of commercial parastatals in Kenya. **Methodology:** The study employed a descriptive survey research design and targeted all the 119 commercial parastatals in Kenya. The study used simple random sampling technique to select 69 respondents from the commercial parastatals in Kenya. Qualitative and quantitative data was analysed descriptively. Inferential statistics was applied where multiple linear regression analysis was done through Statistical Package for Social Sciences (SPSS) to establish the relationship between the selected management accounting practices and the financial performance. The analysed data was presented graphically visually by use of figures and tables. **Results:** The results from the study concluded that management accounting practices including budget process, variance analysis, and break-even analysis affected the financial performance of commercial parastatals in Kenya. From the findings, it was realized that budgeting process is critical in supporting financial performance of commercial organizations under the government parastatals. It was established that variance analysis determines the difference between tangible financial performance and the deliberate financial decisions emanating from the various personnel, which thereafter culminate to improved levels of financial performance of the organization. Break-even analysis affects financial performance of commercial parastatals. **Unique contribution to Theory, Practice and Policy:** The study recommended that the management of the parastatals should adopt budgeting in all financial activities of the firm as it is a central parameter that influences the overall financial performance and dictates how the commercial parastatals utilize assets to generate revenues. Commercial parastatals must have policies in place to help develop financial applications to be used in budgeting and invoicing for monitoring predictions that indicate whether the parastatals are in the right financial trajectories or otherwise.

Key Words: *management accounting, financial performance, accounting practices, commercial parastatals*

INTRODUCTION

Government activities on entrepreneurial issues are not new (Michael, & Pearce, 2009). As such, government entities engage in commercial activities to offer subsidized commercialized option that focuses on delivery of very essential and critical services that are of great importance to the public and the economy (Erserim, 2012). Management accounting presents a critical competitive edge by providing the data needed by organizations to aid with the value addition to the administration's financial, operational and strategic decisions. Consequently, companies employ management accounting practices including budgeting process, variance analysis, activity-based costing, and break-even analysis, to evaluate their operational functions and attain profitability

(Chenhall, & Moers, 2015). As such, innovative management accounting techniques must not only be developed, and adopted, but also implemented in governmental organizations and entities.

Financial performance is the extent to which performance of a firm is expressed in terms of the overall profits and/or losses over a specified period of time. Assessment of financial performance enables the management to give appraisal of the outcomes resulting from the strategic activities of the business in more impartial terms. The operational functioning and performance of the company, models its financial edifice that has far-reaching consequences on the firm's overall wellbeing and abidance. The management's efficiency and effectiveness in the prudent use of the resources is reflected in the firm's high financial performance (Gichuki, 2014). The respective measures of financial performance including return on assets, return on equity and return on sales, should be taken in aggregation and divulge the company's capacity to not only utilize its assets, but also determine the firm's earnings and investments.

State corporations including government parastatals are quasi-government agencies associated with government ministries or departments. Government parastatals are established by the national aspiration to address the socio-economic asymmetry occasioned by historical marginalization of certain regions; endorse foreign direct investments; stimulate indigenous entrepreneurial ventures; and spur economic development (Kenya Law Review, 2012). Incidentally, the parastatals in Kenya are classified as A, B, and C on the basis of the industry they belong to, the ministry they fall under, the size, and the revenue base of the mother ministries. The industry sectors include commercial and manufacturing, financial, regulatory, service, tertiary education and training among others. The commercial parastatals -the subject of this study- fall in the listed categories.

Globally, commercial parastatals have gained prominence in the economic perspective as they are important for value creation which is aimed to benefit both society and public at large. The most giant traders are countries with the largest number of Commercial parastatals (Fafchamps, 2001). In Kenya, commercial parastatals contribute more than 5% employment opportunities to the citizens which in turn accelerate economic growth through income generation to the government. Nevertheless, as averred by Maritim (2013), most commercial parastatals are experiencing high overheads, debts, maladministration and failure to comply with good corporate governance, under-capitation, and corruption, which in turn, negatively impact the financial performance of these parastatals.

Commercial parastatals have been dawdling behind other corporations in regard to financial performance (Mogikoyo, Magutu, & Dolo, 2017). As a result, at their current state, commercial parastatals have become huge government liabilities (Mwega, 2016). This is exemplified by the loss of more than Sh15 billion in non-performing loans lent out to Commercial parastatals and Government agencies, some of which have since become defunct. According to the consolidated financial statement for State corporations and semi-autonomous government agencies over the 2018/2019 financial year released by Treasury, a total of 35 State organs ranging from sugar firms

to local authorities owe the Government a collective Sh15.4 billion in non-performing loans (Government of Kenya, 2019).

STATEMENT OF THE PROBLEM

Commercial parastatals by their very nature are not reliant on exchequer funds to satisfy the operational functions apart from circumstances where the parastatal is incapable of sustaining itself owing to unforeseen performance. Nonetheless, even with huge chunks of money for operations and capital outlays given to them by the government, many commercial parastatals have performed dismally and far below expectation. Against this backdrop, citizens have raised serious concerns on the viability of continuous bailing of these institutions by the government. Empirical evidence indicates that commercial parastatals are bogged down by myriad challenges (Alamri, 2018). These challenges range from mismanagement by those who are in charge, corruption, experiencing high overheads, high debts and poor corporate governance thereby failing to discharge the functions for which they were established. Locally, studies undertaken in regard to management accounting practices and financial performance in government commercial parastatals have not only been inconclusive but also inconsistent. Atieno (2009) conducted a study to determine the challenges related to corporate governance facing parastatals in the sugar industry in Kenya. Similarly, Achonjo (2014) carried out a study to establish the impact of outsourcing on the performance of parastatals in Kenya. Some other empirical evidences that give credence to the continued poor show in performance financially for the government corporations are from researches done by Magutu, Lelei, & Borura (2010), Gichaaga (2014), and Jayantilal (2017). Their findings indicated that without adoption of management accounting techniques, corporations are bound to incur losses. There is therefore, the need to investigate the effects of adoption of management accounting practices on financial performance of commercial parastatals in Kenya.

THEORETICAL REVIEW

Contingency Theory of Management Accounting

Contingency theory of Management Accounting explains that there is no one single and general accounting practices that is generally accepted and practiced by all organizations (Otley, 2016). However, there are certain crucial factors – infrastructural and technological changes - that determine an organization’s choice on which management accounting practice to adopt. The most used accounting practices for control of cost and evaluation of organizational performance, are the budgeting and variance analysis. The theory guides on both the budgeting process and variance analysis by focusing on the unforeseen issues that may impact on financial performance of the organization.

Transaction Cost Analysis Theory

Transaction cost Analysis Theory states that the optimal administrative structure is one that realizes fiscal efficiency by reducing the costs of operation (Dugger, 1983). The theory submits

that every transaction yields management costs of controlling, monitoring, and managing transactions (Mooi, 2015). The theory explains how corporations should and must keep the operational cost at the lowest level possible by minimizing any bureaucratic cost likely to arise from the process of any exchange (Kyläheiko, 2015; and Saeed, Song, & Andersen, 2018). Transaction Cost Analysis is relevant to the study as it presents a cogent case for enabling the organizations to analyse the cost of the decision to transact over a specified time with respect to various management accounting standards. These include, budgeting, variance analysis, and break-even analysis. The company has to weigh the cost experienced while exchanging resources against the bureaucratic cost arising from performing activities in house. As such, if bureaucratic cost arising from firm`s internal activities is lower than the transactional cost from externally, the firm has the potential of growth since it is able to perform its process cheaper than if the activities are done in the market. Each executed management accounting practices in the period of analysis is measured against series of performance indicators with results reflected in multiple interactive tables to highlight the trajectory the firm is taking in terms of financial performance.

Theory of Constraints

The theory of Constraints is a management principle that assists organizations to continually attain their goals and objectives by systematically isolating and refining the most critical bottleneck that counteracts the realization of organization's goals Goldratt, 1990). The theory is predicated on three suppositions including the rate at which the firm generates income through sales, operational expenses, and the inventory that determine the external and internal constraints, such as the physical, equipment, people and policy constraints (Watson, Blackstone, & Gardiner, 2007). To achieve its objectives, organization must innovate around and eliminate all the constraints serving as deterrent to success (Liu, Wang, Yao, & Yue, 2016). This theory is relevant to the study as it puts greater emphasis on the complex systemic nature of an organization comprised of numerous activities and bottlenecks that must be addressed and eliminated to improve the firm's financial outlook.

EMPIRICAL REVIEW

Various empirical literatures have extensively explored the connection between management accounting practices and financial performance. In their study to investigate the budgetary process for effective performance of universities in a resource stricken economy of Zimbabwe, Mutambara, & Chinyoka (2016) stated that budget making process is the most critical part of effective financial performance of any organization. Mohamed, Kerosi, & Tirimba (2016) analyzed the effectiveness of budgetary control techniques on organizational performance at Dara Salaam bank headquarters in Somalia. They observed that organizations use budgetary control as the main ways of internal regulation for the firm as it delivers an all-inclusive management platform for proficient and effective resource allocation. Their findings indicated that without the budgetary process, organizations cannot meet their financial obligations owing to lack of forecast and establishing the mitigating measures.

Gutierrez, & Dalsted (1990) carried out a study on break-even method of investment analysis. They asserted that break-even analysis is a critical tool for determining the nexus between fixed costs, variables costs and returns by computing the volume of production at a given price necessary to cater for all the costs. The scholars observed that as an advantage, break-even analysis points out the relationship between cost, volume of production and returns, as well as indicating the extent to which variations in fixed cost-variable cost links, influence profit levels and break-even points.

Similarly, Alnasser, Shaban, & Al-Zubi (2014) conducted a study with an aim to determine the effect of using breakeven point in planning, controlling, and in the decision making process in Jordanian Industrial firms with 54 staff from the accounting department selected. The findings showed that many of the fiems use breakeven point in making financial decisions as there exists a significant relationship between the use of break-even point and effective planning, control and decision making.

Aruomoaghe, & Agbo (2013) conducted a study to establish the application of variance analysis for performance evaluation as a cost/benefit approach. The findings revealed that the use of variance analysis for performance evaluation has its cost and benefits to the company in general. As such, managers should be cautious even as they use variance analysis so as not to deviate from making correct decisions. Dandago, & Adah (2013) did a study through review of literature to establish the relevance of variance analysis in managerial cost control in Nigeria. The findings revealed that control cost is a continuous process exercised by the management, hence, reviewing of variances needs to concentrate on the most concerned areas to enable the management be aware of any fluctuations in the organization. Matema (2016) carried out a research to establish the relationship between variance analysis budget control technique and organizational performance. Using a descriptive design, to collect data from 27 respondents, the findings indicated a significant negative relationship between variance analysis and organizational performance.

Locally, scholarly literature on management accounting practices abound. Kimunguyi, Memba, & Njeru (2015), conducted a study to establish the effects of budgetary process on financial performance of Non-Governmental Organizations in the Health Sector in Kenya. The study applied priority based budgeting theory and targeted 16844 organizations, where a sample of 270 organizations were selected through stratified random sampling technique. The results revealed that effective budgetary management practices has a positive influence on financial performance of NGOs in health sector in Kenya. Onduso, (2013) did a study on how budget preparation influence financial performance among manufacturing firms in Nairobi County. This study aimed at establishing how affect financial performance budget. This researchers relied on cross-sectional research design with 18 target population of manufacturing firms located in the county of Nairobi. The study found out that there is existed a strong relationship between budget and financial performance based on the results of return on asset.

Gichaaga, P. M. (2014) investigated the effects of management accounting practices on financial performance of manufacturing companies in Nairobi, Kenya. The study employed a descriptive survey design targeting a population of 455 companies, where 46 companies were selected through stratified random sampling. The results of the study established that budgeting is a key management accounting practice in determining the financial performance of the companies. Correspondingly, Waihenya (2018) sought to evaluate the effects of managerial accounting practices on financial performance of manufacturing firms in industrial area, Nairobi. The study employed simple random sampling technique to select a 54 respondents. The results showed that the whole budgetary process including short and long term budget plans have an effect on financial performance. Moreover, the findings also established that analysis of the impact of fixed cost indicated that mixed costs influenced financial performance of the manufacturing firms.

RESEARCH METHODOLOGY

The study employed a descriptive survey research design that targeted all 119 commercial parastatals in Kenya. The study utilized both closed and open-ended questionnaire to collect both qualitative and quantitative data from the 69 respondents from commercial parastatals for analysis. Inferential statistics was applied through which multiple regression was used to determine the nexus between and among the study variables. Data was analysed by means of a Statistical Package for Social Sciences (SPSS).

RESEARCH RESULTS

In analyzing the relationship between management accounting practices and financial performance the study sought to determine the respondents' gender to ascertain whether there was gender parity in the distribution of the respondents. From the results as indicated in Figure 2, 57% of the respondents were male while 43% were female. It can therefore be deduced that male staff were the most in the various commercial parastatals in Kenya. The study had sought to find out the job description for the respondents in commercial parastatals by asking the respondents to indicate their job description. The research findings revealed that 59.4% were working as account officers and 40.6% were working as finance managers. The results indicate that most financial decisions in commercial state parastatals were made by accounting officers.

Work experience presents a profile which has influence on decision which affect financial performance. The study therefore, sought to establish the relationship between the respondents' work experience and financial performance. As such, the respondents were requested to indicate their work experience and the results indicated that that majority 58% of the respondents had work experience of between 6-10 years. On the other hand, 29% of the respondents had a long work experience of over 11 years, 13% of the respondents of the study had a work experience of between 0-5 years. Thus, the findings reveal that most financial decisions are made by staff with long working experience of over five years.

One of the key functions of management accounting practices is budgeting process. The study sought to establish those respondents who participate in budgeting. From the results, the study indicate that majority of the respondents 81.2% participated in budgeting, while 18.8% affirmed that they did not take part in budget preparation. This is an indication that most respondents had knowledge of budget preparation process in commercial parastatals in Kenya.

The researcher sought to determine the extent to which specific management accounting practices affected the financial performance of commercial parastatals in Kenya. The researcher established that three management accounting practices including budgetary process, variance analysis, and break-even analysis had an effect on financial performance of commercial parastatals in Kenya. Under the budgetary process, the researcher noted that the budget preparation, implementation and monitoring affects the financial performance. The results also showed that budget process, which include preparation, implementation, and monitoring, is critical in helping the personnel arrive at decisions that ultimately improve the financial performance of an organization. Under the variance analysis the findings indicated that most respondents had knowledge that variance analysis affects financial performance of the commercial parastatals they work for. This is because variance analysis sought to understand the difference between tangible financial performance and the deliberate financial decisions emanating from the various personnel, which thereafter culminate to improved levels of financial performance of the organization. Finally, under break-even analysis, the results revealed that the respondents had the awareness that analyzing the price levels against the demand levels would contribute to the overall break-even analysis which leads to better financial decisions thereby affecting the financial performance of the commercial parastatals in Kenya.

INFERENTIAL STATISTICS

Inferential statistical analysis was conducted to establish the relationship between the variables. Multiple regression method was applied to establish the relationship upon test of normality and fit of model. Analysis of Variance (ANOVA) was also used to test significance of the relationship between the dependent and independent variables. The study determined to analyze the effects of budget, variance analysis, and break-even analysis on financial performance of Commercial parastatals in Kenya. As such, the results of regression analysis are provided in Table 1 for the model summary.

Table 1: Model Summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.918	.844	.834	.20468

a. Predictors: (Constant), budget preparation, variance analysis, break even analysis.
b. Dependent Variable: Financial Performance

The analysis in the Table 1 indicated that the coefficient of determination which is the percentage variation in the dependent variable being explained by the changes in the independent variables

(the adjusted R^2) is equivalent to 0.834, that is, budgetary process, variance analysis, and break-even analysis. This therefore means that other management accounting practices that influence financial performance other than the three in our study contribute 0.166 of financial performance of commercial parastatals in Kenya. The Analysis of Variance (ANOVA) was used to determine how well the model fits the data. The findings are presented in Table 2.

Table 2: ANOVA (Analysis of Variance)

Model		Sum of squares	Df	Mean Square	F	Sig.
1	Regression	1.423	4	.557	.910	.000[a]
	Residual	5.639	63	.042		
	Total	6.868	67			

a. Predictors: (Constant), budget preparation, variance analysis, break even analysis.
b. Dependent Variable: Financial Performance

A predictor value is termed to be statistically significant when it is less than 0.05 which is significant value. The F statistics is the regression mean square divided by the residual mean square. Since significance value of this study was 0.000 which is lower than the significance value of 0.05 therefore, the model is statistically significant in predicting budget preparations, variance analysis and break even analysis. This is because the predictors' variables including the relationship between the budget process, variance analysis, and break even analysis explain the variation in the dependent variable which is financial performance. The regression results for the analysis of the predictor variables and the dependent variables are provided by Table 3.

Table 3: Regression Coefficients Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	P-values
	B	Std. Error	Beta		
1 (Constant)	0.880	0.081		3.426	0.000
Budget Preparation	0.063	0.123	1.067	2.649	0.000
Variance analysis	0.079	0.106	0.078	1.738	0.463
Break even analysis	0.093	0.100	0.091	0.933	0.355

a. Dependent Variable: Financial Performance.

From the Regression results in Table 3, the multiple linear regression model finally appear as:

$$\text{Financial Performance} = 0.880 + 0.063B + 0.079V + 0.093BE + \varepsilon i$$

The multiple linear regression models reveal that all the independent variables have positive coefficient. The regression results indicate that there is a positive relationship between the dependent variable, financial performance, and independent variables including budget process, variance analysis, and break-even analysis. From the findings, a unit change in budget process results in 0.063 units increase in the financial performance of commercial parastatals. One unit

increase in the variance analysis results in 0.079 increase in financial performance, while one unit increase in break-even analysis results in 0.093 increase in financial performance. The t statistics assists in determining the relative significance of every variable in the model.

CONCLUSION

The study concludes that management accounting practices including budget process, variance analysis, and break-even analysis affected financial performance in the commercial parastatals in Kenya. From the findings, it was realized that budgeting process is critical in supporting financial performance of the nascent commercial organizations under the government parastatals. It was established that variance analysis determines the difference between tangible financial performance and the deliberate financial decisions emanating from the various personnel, which thereafter culminate to improved levels of financial performance of the organization. Break-even analysis affects financial performance of commercial parastatals. This is informed by the realization that the top management had the knowledge and significance of doing break-even analysis and how it affected the firm's financial performance. Lastly, the three variables including budget process, variance analysis, and break-even analysis were recognized as management accounting practices that affect financial performance of commercial parastatals.

RECOMMENDATIONS

The study recommended that the management of the parastatals should adopt budgeting in all financial activities of the firm. The adoption of the budgeting process in organization is a central parameter that influences the overall financial performance and dictates how the commercial parastatals utilize assets with a comprehensive budget process to generate revenues.

The parastatals should limit the use of variance analysis in financial activities as it has its costs and benefits, which therefore calls for cautionary measures be taken to sanction appropriate decision making which impact on financial performance of the firm.

The parastatals should institute policies that help to develop financial applications that can be used in budgeting and invoicing and help the firm realize break-even analysis used to determine and monitor predictions that indicate whether the parastatals are in the right financial trajectories or otherwise.

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