
Effect of control environment and control activities on financial management in public secondary schools of Bauchi state

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Abstract

The study examined the effect of control environment and control activities on financial management in public secondary schools of Bauchi State. A survey research design was adopted where a proportional random sampling technique was used in the study. Data was collected using a structured questionnaire from 380 principals and bursars of public secondary school in Bauchi state. The data collected was statistically treated and analyzed using multiple regression. The findings revealed that control environment and control activities had positive and significant effect on financial management in public secondary schools of Bauchi State. The findings of the study implied that, mismanagement and misappropriation of financial resources by the management of public secondary schools that has become an issue of serious concern among education stakeholders in Bauchi State can be drastically controlled and reduced to ensures proper management of financial resources in public secondary schools in the state by putting in place the appropriate control machineries like control environment and control activities. The study therefore, recommended that Bauchi state Ministry of Education should design the policies and procedures that will ensure a sound control environment and control activities in all public secondary schools of Bauchi state. Also, workshop and seminar should be organized by Bauchi state Ministry of Education to educate the management of public secondary schools in the state on the impact of control environment and control activities on financial management of public secondary schools.

Keywords: financial management, control environment, control activities, public secondary schools

1. Introduction

Nigeria is currently witnessing proliferation of schools, as federal, state and local governments, private individuals and organizations are exercising their constitutional rights in the establishment of schools. The admission into secondary schools has rapidly increased, the volume of funds provided has not expanded to meet the enrolment demands. The result is an acute shortage of staff, funds, physical facilities and equipment. Other indicators for declining quality in education are high drop-out rate, examination malpractices, cultism, hooliganism, drug abuse, sexual

harassment and general lawlessness (Sofulowe, 2012). The fact that the various governments of the federation cannot adequately fund secondary education implies that the institutions must look for other sources of revenue to finance their programs. To varying degrees, secondary education in Nigeria faces the problems of increasing students' enrolment, unsuitable patterns of education expenditure, declining quality of education, unequal access to education, over-reliance by government, inflationary trends, politicization of education, mismanagement of the resources

of the nation and escalation of cost of educational material (Sofulowe, 2012).

Education Trust Fund [ETF] (2016) emphasized that some institutions were unable to draw from the ETF accruals because of their failure to account funds allocated to various institutions, totaling trillion Naira in some states. The inability of the institutions to render timely accounts of the money received and spent portrayed the authorities of the schools as incompetent, if not corrupt. Therefore, it becomes imperative for institutions, firms, organizations and business entities to consider financial management in order to enhance their performance thereby mitigating their exposure to financial risk (Alis 2014). Growth and development of educational sector is dependent on how well finances are managed. Financial management is concerned with the organizational decision on how to source for funds, how to control financial resources through financial controls, prudent allocation of financial resources and accountability measures, it is fundamental for the success of any organization. The rationale for financial management is raising funds for both short- term and long-term use and enhancing proper utilization of the funds (Fung, 2015).

Effectiveness of school is dependent on the role of school-based administrators and the quality of leadership they provide, and the success or failure of any educational institution in terms of the provision of quality Education rest on the effective management of financial resources leading to sustainable development (Usman, 2016; Bilkisu, 2018). Therefore, school heads must utilize the available financial resources to foster Education delivery. That is to say, maintaining financial management effectiveness, efficiency, equity, responsiveness, relevance, reflexivity, focusing on sustainability, which will eventually ensure quality teaching and the learning process of secondary schools (Wango & Gatere, 2016). Financial

Management is a system which provides framework for which the resources of an organization are directed towards the attainment of goals of an organization. Also, effective financial management practice is essential in enhancing transparency, efficiency, accuracy, accountability which enable an organization to achieve its objectives (Padilla et al., 2012).

Unfortunately, it has become an issue of serious concern in Bauchi State that sometimes financial resources are mismanaged and misappropriated by the management of public secondary schools which subsequently affect the qualitative education delivery in the state (Garba, 2021). This is in line with argument of Bua and Adzongo (2014) that poor state of secondary school could be due to the financial management issues such as inability to generate revenue internally and misused of the available resources. Several studies (see for example. Kirsty, 2015; Miriti & Wangui, 2014) suggested that a sound internal control system through control environment and control activities can help the firm to prevent frauds, errors and minimize wastage because it enables an organization to perform or undertake a particular task and prevents errors and losses through monitoring and enhancing organizational and financial reporting processes as well as ensuring compliance with pertinent laws and regulations. This warrants the current study to examine the effect of control environment and control activities on financial management in public secondary schools of Bauchi State.

2. Literature Review

Concept of Financial Management

Financial management is viewed as managerial activities which deal with planning, controlling, organizing the financial resources of an organization: that is, the management of the finances of a business in order to achieve the financial objectives of the business (Donnell &

Keontz in Amirizen & Ololube, 2018). Brockington (2013) defined financial management “as that part of the total management function which is concerned with the effective and efficient raising and use of funds”. Okwori (2016) said financial management involves recognition and respect for authorities, regulations and practices governing the receiving, keeping and spending of funds. Kwaghbo (2018) defines financial management as planning, organizing, coordinating, directing and collecting of payments in such a way as to achieve organizational goals. He also stresses that school managers should have sufficient knowledge of financial management techniques in order to be effective financial managers. He added further that financial manager is one who forecasts, plan budgets (involving heads of departments) and executes the budget according to specified estimates that funds are effectively and efficiently used to achieve the desired objectives of the school. Okwori (2016) defines financial management as the forecasting, planning, organizing, directing and controlling of all activities relating to the acquisition and application of financial resources of an enterprise in the keeping with the financial objectives. Ogbonnaya (2018) says that the central purpose of financial management whether in government, in business, or individual is the raising of funds and ensure that the funds so mobilized are utilized in effective and efficient manner”. Financial management aims at securing fund and utilizing such funds effectively and efficiently on the project mapped out. Ogbonnaya asserts that good performance of any school program depends very much on the way the financial inputs are managed. Without good financial management the program of secondary schools will not be properly implemented. He says that good financial management leads to increase in the output of funds utilization and proper allocation of the funds are among competing alternatives.

2.1 Control Environment

The control environment is the set of principles, processes, and structures that provide the basis for carrying out internal control across the organization. The board of directors and senior management create the tone at the top regarding the importance of internal control including expected standards of conduct. Management strengthens expectations at the various levels of the organization (Oduol, 2011). The ethical environment of an organization embraces aspects of higher management's character in achieving organizational objectives, substantial judgments, and managing styles. This component is the underpinning for all other components of internal control, providing both discipline and structure to the organization. Moral business practices, management philosophy and a sense of business integrity all play key parts in the control environment element (COSO, 2013). Control environment covers the uprightness and moral values of the organization; the limits enabling the board of directors to carry out its governance oversight responsibilities, organizational structure and assignment of authority and responsibility, the process for attracting, developing and holding competent individuals and the rigor around performance measures, inducements, and payments to drive answerability for performance (Davis, Allen & Hayes, 2014). Uwadiae (2013) described a control environment as the set of standards, processes, and structures that provide the basis for carrying out internal control across an organization. The study noted that top management has the responsibility to establish functional internal control including expected standards of conduct. The resulting control environment therefore has a pervasive impact on the overall system of internal control. Gamage et al (2014) noted that the control environment includes the attitudes, awareness, and actions of those charged with governance concerning the entity's internal control and

their importance in the entity. Additionally, Mire (2016) emphasized that control environment is the foundation on which an effective system of internal control is built and operated while Umar and Dikko (2021) identified element of control environment to include; communication, enforcement of integrity, and ethical values. Dubihlela and Nqala (2017) emphasized that a control environment forms the basis of any system of internal controls.

2.2 Control Activities

Control activities are the actions established through guidelines and procedures that help ensure that management's directions to mitigate risks to the achievement of objectives are carried out. Control activities are accomplished at all levels of the entity, at various stages within business processes, and over the technology environment. They may be deterrent or detective in nature and may encompass a range of manual and automated activities such as authorizations and approvals, verifications, reconciliations, and business performance reviews. Segregation of duties is typically built into the selection and development of control activities. Where segregation of duties is not practical, management selects and develops alternative control activities (Garcia, 2014). Control activities are the policies and procedures that assist in ensuring that management directives are successfully implemented. They provide the means to address the various risks that may hinder the achievement of the organization's objectives. In essence, control activities are established in response to apparent risks. Control activities as policies and procedures that help ensure that management directives are carried out. They help ensure that necessary activities are taken to address risks to the achievements of the entity's objectives. Control activities occur throughout the organization at all levels and all functions. Control activities include a range of activities; authorization, verifications, reconciliations, reviews of operating

performance security of assets and segregation of duties (Gbegi, Adebisi & Makurdi, 2015).

According to Uwadiae (2013), control activities are the actions established through policies and procedures that help ensure that management's directives to mitigate risks towards the achievement of set objectives are carried out. The study pointed out that control activities are performed at all levels of the entity, at various stages within business processes and over the technology environment. Such activities may be preventive or detective in nature and may encompass a range of manual and automated activities such as authorizations and approvals, verifications, reconciliations, and business performance reviews. This was buttressed by Mire (2016). Segregation of duties is typically built into the selection and development of control activities. Management should establish control activities to effectively and efficiently accomplish the organization's objectives and mission. In the view of Amudo and Inanga (2019), the study considered authorization, segregation of duties, and verification before making the payments, control over access to resources, reconciliation, review operations and supervision as the control activities in any organization. Mire (2016) however noted that control activities enable organizations to establish suitable procedures to reduce loss.

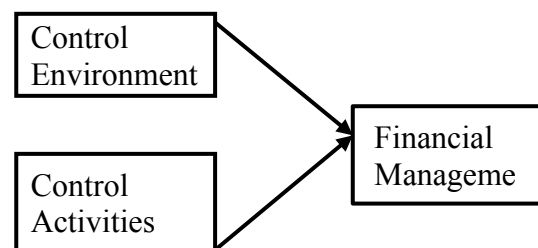


Figure 1: Research Framework

A framework of this study that indicates the relationship between control environment, control activities and financial management is developed based on the Agency Theory

(see Figure 1). The theory was developed by Jensen and Meckling (1976). The theory recommends several control machineries to safeguard shareholders' returns and expedite principal-agent interest alignment. Therefore, control environment and control activities are some of the machineries that would ensure financial management in organization. The following hypotheses are formulated guide the study:

H1: Control environment has significant effect on financial management in public secondary schools of Bauchi State.

H2: Control activities has significant effect on financial management in public secondary schools of Bauchi State.

3. Methodology

A survey method is adopted when a study is trying to assess thoughts, feelings, and opinions about a given situation by collecting primary data from the respondents (Cresswell, 2012). The survey method allows the researcher to gather quantitative data and analyze it using descriptive and inferential statistics. Then, possible reasons for particular relationships between variables can be suggested and models of these relationships can be produced (Sekaran & Bougie, 2016). The present study is interested in studying the opinions of principals and bursars of public secondary schools in Bauchi state with regards to the control environment, control activities and financial management of public secondary schools. Hence, a survey design was appropriate in achieving the objectives of this study. The population of the study comprised 1388 principals and bursars of public secondary schools in Bauchi state. The principals and bursars were considered in this study due to the fact that they are the officer's saddle with responsibility for managing the financial affairs of public secondary schools. Hence, they were appropriate in providing the information

needed for achieving the objective of this study. The sample of this study consisted of 402 principals and bursars of public secondary schools in Bauchi state (i.e., 201 principals and 201 bursars). The sample was statistically determined using GPower which is statistical software for power analysis and sample size calculation (Faul, Erdfelder, Lang, & Buchner, 2017). Proportional random sampling technique was used to select the sample of principals and bursars used in this study.

The study adapted measurements from the existing studies related to this study, this will be done because Sekaran and Bougie (2016) recommended that a researcher can adopt or adapt measurement from the existing studies relevant to the current research. The study has three (3) constructs; control environment was measured with 11 items adapted from Chacker and Abdullah (2011), control activities was measured with 10 items adapted Chacker and Abdullah (2011) and financial management was measured with 12 items adapted from Matilda, Summary and Erewarifagha (2018). In this study, Likert scale was adopted for all the items, the respondents were asked to indicate their responses to each question on a five-point scale. To ensure the reliability of instrument of the present study, the pilot test was conducted in Gombe state with 60 principals and bursars of public secondary schools. The state is outside the study area but the respondents have similar characteristics with the sample of this study. The 60 registered women entrepreneurs satisfied the recommended pilot test range from 25-75 (Hair et al., 2017). The data generated from the pilot survey was subjected to statistics analysis using Cronbach Alpha. The Cronbach alpha coefficients of the three variables are; control environment (0.73), control environment (0.81) and financial management (0.80). The results suggested that the instrument is reliable based on the recommendation given by Hair et al.

(2017). According to Hair et al. Cronbach alpha coefficient of at least .70 is considered satisfactory and acceptable. Finally, data analysis, SPSS 25 was used throughout the process. The effect of control environment and control activities on financial management was determined

4. Results and Discussion

Table 1: Regression analysis

Variable	Standardized Coefficients Beta	t-value	p-value	Decision
Control Environment	0.193	5.558	0.000	Supported
Control Activities	0.343	3.739	0.000	Supported

After checking and satisfying the necessary assumptions of regression analysis, Hair et al. (2017) recommendation was followed in interpreting the result of this study. Hair et al. recommended that when interpreting the result of multiple regression, a researcher should first consider the F value, then the R-square value or adjusted R square, and follow by the individual contribution. Following their recommendation, in this study, the statistical evidence has proved that the model was statistically significant based on the F ratio 43.214, $p = .000$. The result also revealed the R^2 value of of .49, indicating that the model fit is large (Murphy, Myers & Wolach, 2014).

Concerning the individual contribution of independent variables, the variable control environment had positive and significant effect on financial management in public secondary schools of Bauchi State (β 0.193; $t=5.558$; $p=0.000$). This indicated a significant contribution of the variable in the model. Hypothesis 1 is therefore supported. Similarly, the variable control activities significantly predicted financial management in public secondary schools of Bauchi State based on t-statistics and p-values (β 0.343; $t=3.739$; $p=0.000$). This indicated that control activities had positive and significant effect on financial management in public secondary schools of

using multiple regression. A multiple regression is a statistical technique for testing the influence of a number of independent variables on one continuous dependent variable (Tabachnick & Fidell, 2013).

Bauchi State. Hypothesis 2 is therefore supported.

Discussion of Findings

The findings of this study revealed that control environment had positive and significant effect on financial management in public secondary schools of Bauchi State. The finding is consistent with the study of Bett and Memba (2017) in the context of Kenya. They found that control environment has a significant influence on the internal control system effectiveness. Similar finding was reported by Kisanyanya (2021) that control environment had significant effect on financial performance of public institutions of higher learning in Vihiga County, Kenya.

Additionally, the finding of this study also revealed that control activities had positive and significant effect on financial management in public secondary schools of Bauchi State. The findings concurred with arguments in the existing literature, such as studies of Mawanda (2014) who revealed a significant relationship between control activities and financial performance of institution of higher learning in Uganda. The finding is also supported by the study of Ejoh and Ejom (2014) who established the significant impact of control activities on financial performance of tertiary institutions in Nigeria using Cross River state college of education as a case study.

5. Conclusion and Recommendations

The present study provided empirical evidence on the effect of control environment and control activities on financial management in public secondary schools of Bauchi State, Nigeria. The study established that control environment and control activities had significantly predicted financial management in public secondary schools of Bauchi state, Nigeria. Specifically, the study established that control environment and control activities are strong and significant predictors of financial management in public secondary schools of Bauchi state. Therefore, mismanagement and misappropriation of financial resources by the management of public secondary schools that has become an issue of serious concern among education stakeholders in Bauchi State can be drastically controlled and reduced to ensure proper management of financial resources in public secondary schools in the state through a sound internal control system. Specifically, by putting in place the appropriate control machineries like control environment and control activities.

Based on the findings of the study, the following recommendations are made:

1. Bauchi state Ministry of Education should design the policies and procedures that will ensure a sound control environment in all public secondary schools of Bauchi state.
2. Bauchi state Ministry of Education should design the policies and procedures that will ensure sound control activities in all public secondary schools of Bauchi state.

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