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THE EFFECT OF INTERNAL CONTROL SYSTEMS ON ACCOUNTABILITY IN NATIONAL WATER AND SEWERAGE CORPORATION IN UGANDA

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Abstract

The paper examined the effect of internal control systems on accountability in National Water and Sewerage Corporation. Internal control systems is an integral part of an organizational governance systems and adherence to set rule and regulation help in enhancing performance. The study adopted a descriptive correlational and cross-sectional survey design, involving mainly a quantitative approach and supplemented with a qualitative approach. The study concluded that effect of internal control on accountability having the overall mean= 3.20; SD=0.354 is generally effective in National Water and Sewerage Corporation. The components of risk assessment and control environment are more important in enhancing accountability than other components. Therefore, this study found clear guidelines for National Water and Sewerage Corporation for purposes of improving accountability and performance. The study recommended that the management of National Water and Sewerage Corporation should promote the effectiveness of the control environment component of internal controls, in order to enhance performance by implementing policies and procedures to ensure that directives are properly followed in the organization. This study advanced knowledge by linking the effect of internal control systems on accountability to agree with agency theory and stakeholder theory.

Keywords: internal control systems, accountability

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Vol. 9 Issue 03
March 2022

Introduction

Internal controls have gained prominence over the years because of a number of undeniable corporate scandals that have cost organizations huge chunks of their finances leading to the collapse of some (Meintjes, 2013). Internal control includes a number of methods and measures, which are exercised by the management to ensure smooth and economic functioning of business entity. It assists the management in the performance of various functions (Shanmugam, Haat & Ali, 2012). A system of internal control is put in place to keep the organization on course toward profitability goals and achievement of its mission and to minimize surprises along the way.

Internal controls have existed since the emergency of organized systems. When the Israelites were in the desert during their exodus, Moses their leader recognized the importance of keeping accurate records as control activity. In the book of Exodus 38:21-31, it is indicated these are the accounts of the Tabernacle (Gellis, Giladi & Friedman, 2002). Tallies provided the earliest form of internal control as control activities until they were officially abolished in 1826. Muraleetharan (2011) related internal control and impact of financial performance of the organizations in public and private organizations in Sri Lanka. using regression analysis, the study revealed a positive significant relationship between risk assessment, control activities, procedures and practices and monitoring internal controls with financial performance but the relationship was insignificant for control environment and information and communication internal controls. Nyakundi, Nyamita&Tinega (2014) investigated the effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City, Kenya. Their regression analysis revealed that internal controls significantly influenced the financial performance. However, the context of the above studies was outside Uganda public owned institutions and the study by Muraleetharan (2011) indicated an insignificant relationship between control environment and information and communication and organizational performance. It is from the above background that this study sought to examine the effect of internal control systems on accountability in National Water and Sewerage Corporation in Uganda.

Objective

The effect of internal control systems on accountability in National Water and Sewerage Corporation in Uganda

Internal Control Systems and Accountability in Organizations

Feyisayo and Odunayo (2019) assessed the effectiveness of internal controls in government ministries in Nigeria. It was found out that annual budgets were prepared promptly and that there was adequate expenditure tracking to reduce financial wastage. The findings suggested that there was adequate accountability due to strong controls.

Adegbite (2010) opined that the public sector exists to provide the basic infrastructures and services to the public and this makes the government accountable to the public. Okoh and Ohwoyibo (2010) explained why accountability in Nigerian public sector fails, including poor record keeping systems in most public establishments, fraud practices, the vicious cycle of poverty

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March 2022

in the country, poor value systems, unclear ways of releasing public funds, shortage of staff, shortage of facilities and weak monitoring. Appah and Coleman (2009) reported that there are wide spread cases of fraud in every part of the Nigerian public service. In such a situation where the vice of financial misconduct is very much wide spread, it becomes difficult for internal controls to be instituted effectively and therefore, accountability remains in reports but missed in reality.

Ntongo (2012) conducted a study on the effect of internal controls, financial accountability and service delivery in private health providers of Kampala District. Her findings reveled that there is a significant positive relationship, individually, between internal controls, financial accountability and service delivery. While the researcher claimed that both internal controls and financial accountability are significant predictors of service delivery, neither moderation nor mediating analyses were conducted and so the results displayed were from multiple linear regression. This adds to the previous point that studies on the mediating effect of accountability in the relationship between internal controls and organizational performance are scanty.

Kakuru (2001) explained that a business that has several financial transactions, internal controls must be well implemented, to avoid negative performance and productivity and hence, its retardation. Kakuru's explanation suggested that; internal controls help managers to obtain the best measures on the impact of various transactions and thus enhance proper accountability. The ACCA (2004) stipulated that the internal control component of control activities involve policies and procedures formulated by management to ensure that the activities of the organization are effectively carried out, to achieve its goals.

Miller (2007) examined the documentation of internal controls and concluded that poor internal controls lead to asset misappropriation, corruption and fraud in financial statements. The findings by Feyisayo and Odunayo (2019) explained that effective internal audit has the potential to effectively reduce fraud and fraudulent actions in public sector.

Fadzil, Haron and Jantan (2008) examined the effect of internal audit practices and internal control systems on organizational success in Nigeria. In one of their objectives, they used a correlational analysis to establish the correlation between internal control effectiveness and success of the organization in achieving revenue targets. Their findings confirmed a positive and strong correlation between these variables. Okoh and Ohwoyibo (2010) explain that ineffective internal control systems are more devastating to the public as a whole since, they expose public resources to wastage and abuse, breaking the trust and respect the public has in public workers. They therefore added that any steps to protect public resources minimize wastes and reduce fraud increase effectiveness of service delivery. Effective internal controls can help to achieve this. They recommend that internal control steps and procedures need to be taught to all employees, so as to enhance service delivery in public sector institutions.

Methodology of the study

This study employed both descriptive correlational and cross-sectional survey design. This involved mainly a quantitative approach and supplemented with a qualitative approach. The cross

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March 2022

sectional survey design was employed to collect primary data by sampling a cross-section of a big sample of respondents from the employees of NWSC.

The descriptive correlational design was used to collect data with an objective of systematically explain how effective the internal controls are being implemented and whether this effectiveness is significantly linked to the extent to which NWSC is performing. The systematic description of the effectiveness of internal controls and performance in NWSC, helped to provide adequate information about the situation in NWSC on these two aspects (internal controls and accountability). The study was based on a sample size of 184 drawn from a population of 350 NWSC employees was adequate for this study. This sample size of 184 was sufficient as derived from Krejcie and Morgan (1970).

Internal Controls

The testing of the third null hypothesis where internal control systems was the independent variable and accountability the dependent variable. The overall mean for all the three constructs of accountability (overall mean= 3.20; SD=0.354) falls under effective interpretation on scales of measurements. For all the three constructs of accountability, responsiveness was rated to be the most effective, with an average mean of 3.33 (SD=0.423), which falls under very effective on interpretation scale. This was followed by transparency (average mean = 3.15; SD=0.438) and then compliancy (average mean = 3.13; SD = 0.390) came as the least. A correlational analysis with the Pearson's linear correlation coefficient was carried out and the results were in the table below.

Pearson Correlations for Internal control system components and Accountability in NWSC

Variables correlated	**r-value**	**Sig.**	**Interpretation**
Risk Assessment Vs Accountability	.546**	.000	Significant correlation
Control Environment Vs Accountability	.587**	.000	Significant correlation
Control Activities Vs Accountability	.565**	.000	Significant correlation
Risk Monitoring Vs Accountability	.522**	.000	Significant correlation
Internal Control Systems Vs Accountability	.640**	.000	Significant correlation

Correlation is significant at the 0.01 level (2-tailed). The results in the table indicated that all the four internal control components, were found to be positive and significantly correlated with accountability in NWSC. The findings indicated that all the four components of internal control systems (Risk assessment, control environment, control activities and risk monitoring) whether individually considered or taken together are positively and significantly correlated with accountability at NWSC (all sig. values < 0.05). Therefore, the null hypothesis is rejected and the

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Vol. 9 Issue 03
March 2022

alternative one is accepted. The findings imply that effective internal controls can positively improve accountability and weak internal controls may bring problems of accountability.

Multiple Linear Regression Analysis Results for Internal Control Components and Accountability in NWSC

Variables Regressed	Adjusted R^2	F-value	Sig.	Interpretation	Decision on Ho
Internal Control Components Vs. Accountability	.398	30.908	.000ª	Significant effect	Rejected
Coefficients	**Standardized Beta**	**t**			
(Constant)	1.190	6.376	.000	Significant effect	Rejected
Risk Assessment	.175	2.034	.043	Significant effect	Rejected
Control Environment	.251	2.584	.011	Significant effect	Rejected
Control Activities	.152	1.543	.125	Insignificant effect	Accepted
Risk Monitoring	.158	1.897	.059	Insignificant effect	Accepted

Source: Researcher's computation (2021)

The findings reveal that all the four internal control components taken together significantly affect accountability in NWSC (F=15.866, sig. = 0.000). The adjusted r-square indicates that, the four components of internal control systems taken together, accounted for 39.8% towards variations in accountability of NWSC (adjusted R^2=0.398). The remaining percentage, 61.2% is the contribution of other factors not included in this model.

The model coefficients further reveal that, of the four components of internal control systems, only two, that is risk assessment ($\beta = 0.175$, $p = 0.043$) and control environment ($\beta = 0.251$, $p = 0.011$) were found to be positive and significant determinants of accountability, the rest were not. The predictive strength of the respective betas suggest that control environment has a stronger effect on accountability, indicating that a one unit improvement in its effectiveness yields a 0.251 improvement in accountability, which is higher than 0.175 in case of a one unit increase/improvement in risk assessment, leaving other factors constant.

DISCUSSION

In this section the study's findings was discussed in light of the research objective and findings of previous researches. The headings of the discussion are structured according to the research objectives. The purpose of this study was to establish whether there is an effect of internal control which is our independent variable and accountability which is our dependent variable in National

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March 2022

Water and Sewerage Corporation in Uganda. Our independent variable was broken in to three components which are Responsiveness, Transparency, Compliancy and each of them was regressed to performance of NWSC cited below.

The findings indicated that all the four constructs of internal control systems are positively and significantly correlated with accountability in NWSC sign (.640**).

The findings show that each of the four constructs of internal control systems (Risk assessment, control environment, control activities and risk monitoring) taken individually or taken together positively and significantly correlates with accountability in NWSC. Therefore, based on these results, the null hypothesis is rejected and the alternative is accepted, suggesting that an increase in internal control systems improves accountability of NWSC and vice versa.

The findings showed that NWSC is generally performing well and this good performance is attributed partly to effective internal controls. Though the contribution of internal controls explains less than 25% of the variations in performance, other factors which help this government organisation to perform well need to be explored. These findings are in line with the postulations of the Agency theory, which predict that effective internal control systems can enhance performance of organisations (Davidson *et al*., 2015). The theory predictions do not discriminate public and private organisations.

The findings also showed that respondents rated accountability in NWSC to be generally effective, with an overall mean of 3.20 and a Standard Deviation of 0.354. Factor analysis tests confirmed that all the questions on accountability were valid and reliable. Pearson's linear correlations results showed a positive significant relationship between all the four internal control components and accountability in NWSC, with all sig.-values being ≤ 0.01. Multiple linear regression results revealed that all the four internal control components taken together, significantly affect accountability in NWSC ($F=15.866$, sig. = 0.000), accounting 39.8% towards its variation (adjusted $R^2=0.398$). For all the four components of internal controls, risk assessment ($\beta = 0.175$, $p = 0.043$) and control environment ($\beta = 0.251$, $p = 0.011$) were the actual components that help to improve accountability. These findings imply that not all components of internal control and important in improving accountability in NWSC, rather, it is mainly the component of risk assessment and control environment which should be emphasised. The findings further imply that in trying to improve accountability in NWSC, control environment practices are more important and so have to be given extra attention

Conclusion

Improving efficiency of internal controls will help NWSC to improve their performance. Control activities and risk monitoring are more effective in enhancing performance in NWSC than other components. Given the nature of activities of NWSC, controlling activities of workers is more important, as their actions can be more risky and cause more losses to the organization, if not effectively controlled. Since many staff tasks involve going to the field and dealing with

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March 2022

complaints of clients constantly, controlling activities and constantly monitoring risks can go a long way in shaping up staff conduct for purposes of enhancing performance of the organization.

The internal control components are important in building strong accountability in NWSC. Effectiveness of internal controls is more important in enhancing accountability than it does in enhancing performance of NWSC. The components of risk assessment and control environment are more important in enhancing accountability than other components. Therefore, this study found clear guidelines for NWSC for purposes of improving accountability and performance. Controlling environment and risk assessment helps to regulate staff dealings and emphasize activity reporting and approval, which eventually helps improve accountability.

Recommendation

For all the internal control components, management of NWSC should put much attention on risk monitoring and control activities. These were found to be more important in determining the performance of this organization.
Regarding accountability, the management of NWSC should increase service extension to customers, by increasing the number of field officers.

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Vol. 9 Issue 03
March 2022

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