EFFECT OF RISK ASSESSMENT ON THE WORKING CAPITAL MANAGEMENT OF PUBLIC SECONDARY SCHOOLS IN KENYA

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*Abstract***:** *In Kenya, public secondary schools have consistently announced lack of funds with no records of financial records, causing school operations such as procuring teaching materials, remunerating teachers hired by the Board of Management (BOM), completing school infrastructure schools, and supporting academic programs to be hampered. All these point to poor working capital management. Previous studies on this problem have failed to link internal control systems with public secondary schools' working capital management. This study's main objective was to determine the effect of internal control systems on public secondary schools' working capital management. In particular, the study sought to establish the effect of risk assessment on the working capital management of public secondary schools in Kuria, Kenya. The research was driven by theories of agency, stewardship, and optimistic accounting, and used a cross-sectional research design. The study population was the chairs of the BOM Information system subcommittees of Kuria's public secondary schools. All 67 chairpersons of the Information system subcommittee in public secondary schools were selected using census. Results showed that risk assessment has a positive statistically significant effect ($\beta = 0.205$, $p = 0.000$) on public secondary schools' working capital management. Based on correlation results, the association between risk assessment (X_1) and working capital management was found to be positive and significant ($r = 0.719$; $p = 0.00$).*

Keywords: *Internal Control Systems, Working Capital Management, Public Secondary Schools, Risk Assessment*

Effect of risk assessment on Working capital management.

Working capital management is defined by the association's goals and the creation of programs to achieve these objectives in quantitative terms. Therefore, money management is a control system that defines how to use available capital best to achieve high-quality results to meet school objectives and goals. Working capital management (FM) is a vital component of an organization's performance. Many assets are associated with operating organizations, and to profit from such schools, the persons in charge must be forthright and responsible (Burke, 2001).

In the United Kingdom, Liyuqi (2007) investigated bank profitability determinants and their effects on risk management activities. Between 1999 and 2006, regression analysis was used on a time series data set. Six determinants of bank profitability were used in the study. They identified liquidity, credit, and resources as internal performance determinants for banks. External determinants of bank profitability included GDP growth rate, interest rate, and inflation rate. The six variables were combined into a single overall bank profitability composite index. The return on asset (ROA) was used as a profitability metric for the bank. Liquidity and credit risk were discovered to have a detrimental impact on bank profitability. However, since the study was

conducted in a more developed country than Kenya, the results could differ in Kenyan public secondary schools.

Githinji (2010) conducted a report on Credit Risk Management and Commercial Bank Profitability in Kenya to determine how much credit risk management in practice contributed to high profits in Kenyan commercial banks. For the years 2004 to 2008, data on credit measurement, non-performing loan levels, and income were gathered. The study's findings revealed no connection between earnings, credit measurement, and the degree of nonperforming loans. The results indicate that most commercial bank profits are unaffected by credit and nonperforming loan initiatives, suggesting that profits are driven by factors other than credit and nonperforming loans. Commercial banks that are eager to make a lot more money should concentrate on various factors other than credit metrics and nonperforming loans. The results were explained using a regression model, which revealed no significant relationship between the banks' benefit and the credit risk management intermediary's level of Non-performing Loans and Loans and Advances/Total Assets. This research, however, did not cover all facets of risk assessment and working capital management.

In many countries, the education sector has a sizeable budgetary commitment, and therefore stable working capital management is essential. The training attracts a lot of coverage worldwide because it influences human capital development. According to UNESCO (2000), low levels of training are detrimental to any country's economy. As a result, secondary education in some countries, such as the United Kingdom, the United States, Canada, Egypt, and Nigeria, is entirely sponsored by the government.

The cost of secondary education in Kenya is split between guardians and the government. According to the Ministry of Education (2012), public schools consume approximately 23% of the ministry's expenditure. Nonetheless, despite other challenges such as pay scales and advancement costs, which include additional levies that guardians must meet. The school principals handle funds in secondary education schools with the approval of the Board of Management, Department of Education and Culture (2009). Their goal is to ensure that schools perform well using the resources available, regardless of payment issues. Delays influence the essence of administration conveyance in obtaining funds from the government and parents. It has also been observed that the majority of school principals operate without regard for the budget but a purchase plan and propose non-existent schools in schools.

Even though education is still under the national government's jurisdiction, most schools are located in counties where laws and guidelines are ignored. In daily administration of a secondary school is the obligation of the principal, who is appointed by the Ministry of Education on merit. Secondary schools in Kenya are governed by a Board of Management (BOM) and a Parents Teachers Association (PTA). The BOM is appointed by the Ministry of Education with parental representation, while PTA members are appointed by the parents of that particular school. While the BOG has final authority over all school matters, the PTA is mainly in charge of resource mobilization (Simiyu, 2014). Kenya's education system is overseen by the Ministry of Education, from primary school to university. School fees have long been an impediment for many students, but with the introduction of free secondary education in both primary and secondary schools, this is slowly changing (Ngware *et al.,* 2007). On the other hand, internal control systems have been used to show that working capital management is successful (Kinyua, 2016). To achieve its goals, an organization can implement its system of controls (Mwindi, 2008).

Kuria is divided into four sub-counties in Migori County, Kenya: Kuria East, Kuria West, Mabera, and Ntimaru. Rongo, Awendo, Uriri, Suna East, Suna West, Kuria East, Kuria West, Mabera, and Ntimaru are

among the ten sub-counties in Kenya's Migori District. There are 67 public secondary schools in Kuria, divided into nine districts: Kuria East 9, Kuria West 19, Mabera 18, and Ntimaru 14.

In Kuria, there are severe issues with working capital management in public secondary schools. The Information system department has raised concerns about difficulties in keeping records of schools' overall financial results as bursars refuse to forward trial balances. Schools in Migori County complied with the Information system report 36.12% of the time (Gok, 2018), with Kuria accounting for 12.31 percent of the total. Even though the government invested heavily in education, secondary schools were allocated 32 billion for FDSE in the 2016/2017 financial year, with Kuria East and Kuria West benefiting (RoK, 2016) that resources needed in schools were available. In several AGM meetings for the year 2019, parents complained of school embezzlement of funds dispatched by the CDF of the two constituencies that make up Kuria, Kuria East and Kuria West. School funds received by Constituency Development Funds for infrastructure development have not been accounted for, raising questions about working capital management; capitation from the government based on learners collected by the National Education Management Information System has consistently raised transparency gaps. School funds raised by Constituency development funds for infrastructure development have not been accounted for, raising queries on working capital management; capitation from the government based on National Education Management Information System learners captured has continuously raised gaps in accountability by the school management in Kuria. This suggests that the effect of internal control systems in the working capital management of public secondary schools in Kuria has not been determined.

Statement of the problem

There are significant problems concerning working capital management in public secondary schools in Kuria. The Information system department has repeatedly expressed concerns about keeping a record of school finances as bursars refuse to forward accounting reports. School funds collected by Constituency Development Funds for infrastructure schools have not yet been accounted for, raising questions about working capital management; capitation from the government based on learners captured by the National Education Management Information System has continually raised transparency gaps in school management in Kuria.

According to a study issued by the Ethics and Anti-Corruption Commission in 2018, headteachers issued inaccurate enrollment statistics (Floazette, 2015). Fake signatures, the supply of ghost books, inflating prices, and the single-sourcing of supplies by school instructional materials procurement committees were all part of the fraud. In terms of financial control, school administrators have always disobeyed the government's fee guidelines. Principals were releasing incorrect enrolment statistics, flouting procurement rules, taking bribes, and hiding vital Information system records to steal free educational funds, according to a study released by the Ethics and Anti-Corruption Commission in 2018.

Several research on the effects of working capital management internal control systems have been performed. The effects of internal control systems on private hospitals' financial performance in Nairobi were investigated by Muio (2012). The study found a connection between successful internal controls and high financial performance; however, public secondary schools were not included.

However, the investigation results were too general and did not directly address Internal Control over Monetary Administration in Kenyan Public Secondary Schools. As a result of the above exact writing report's findings, it is clear that numerous internal controls related to the working capital management of Kenyan public secondary schools have yet to be thoroughly discussed. Against this backdrop, this research aimed to determine

the effect of internal controls on secondary school working capital management through a case study of schools in Kuria, Kenya.

Objective of the Study

This general objective of the study was to determine the effect of internal control systems on the working capital management with a specific objective to effect of risk assessment on the working capital management of public secondary schools. Survey of secondary schools in Kuria, Kenya.

Research Methodology

The study employed a correlational study research design. A population is characterized as the entire group of components from which conclusions are drawn, and it applies to all possible scenarios relevant to a study (Sekaran, 2008). According to Smith (2011), a population is a large category of all objects from which a sample is to be drawn. The study's participants were 201 respondents from the 67 secondary schools in the sub-county. This comprised the 67 chairpersons of the Information system subcommittee of the B.O.M, the 67 Principals and the 67 bursars of Secondary Schools in Kuria. The population was selected because they are the ones who have knowledge on internal control systems and working capital management. The Krejcie and Morgan (1970) tables was used to select a sample out of the 201. According to the table if the population is 201, then the sample should be 132. This sample will then be distributed proportionately among the three strata to give 44 respondents per strata. Data for the study was gathered using questionnaires. This method of data collection was chosen because it is simple to administer, analyze and is cost-effective in terms of the time and capital.

Research and Discussion

The research instrument was divided into two sub-sections for each of the research variable. The two sub-sections consisted of closed ended questions. These questions provided respondents with statements opinion to select from Likert scale. These questions were first analysed descriptively to isolate the latent features of their opinion on the internal control practices and the level of working capital management. The results for the analyses are explained in the sub-sections below.

Descriptive Results of Risk assessment

The specific objective of the study was to determine the influence of risk assessment practice on working capital management in public secondary schools in Kuria East, Kenya.The respondents were asked to indicate their levels of agreement or disagreement with specific statements drawn from measures of this risk response measure. A five-points Likert's scale was used where 1 was Strongly Disagree, 2 was Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Descriptive statistics used to analyse the data were weighted means and the standard deviation. *Table 1* shows the findings.

Table 1: Descriptive Results of Risk assessment

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

Statements	SD	D	N	A	SA	Mean	Std. Dev.
Risk assessment is an important element of your institution	21.3%	14.5%	3.6%	42.5%	18.1%	3.21	1.45

Risk Control and Reporting are available.	21.3%	17.6%	2.7%	45.2%	13.1%	3.11	1.41
There is a documented risk management framework for the identification and management of risk.	20.8%	18.1%	12.7%	44.8%	3.6%	2.92	1.26
There is a formal process to assess and analyse risk.	20.4%	43.1%	2.7%	15.2%	18.6%	3.28	1.43
The school ensure preparation of financial statements	20.4%	62.2%	0.0%	17.4%	0.0%	3.14	1.26
The school ensure instant banking of cash receipt	18.4%	12.2%	0.9%	44.5%	24.0%	3.37	1.47
Audit is always performed to obtain reasonable assurance	20.8%	18.1%	12.7%	44.8%	3.6%	2.92	1.26
There is adequate inventory management policy	21.3%	14.5%	3.6%	42.5%	18.1%	3.21	1.45
Average						**3.17**	**1.01**

Eight statements were used to measure risk assessment. Of the statements, the respondents generally neither agreed nor disagreed on whether risk assessment strategies were instituted in the Public secondary schools in Kuria East. This is shown by the weighted average means of between 2.92 and 3.37 which are all close to 3. However, out of the six statements, the respondents rated the statement that the school ensure instant banking of cash receipt highest with a weighted average mean of 3.37 while the statement that there audit is always performed to obtain reasonable assurance in the public secondary schools in Kuria East being executed received the lowest rating with a weighted mean of 2.92. The weighted average of 3.17 shows that generally, the respondents were undecided on whether risk assessment practice was instituted in the schools.

Descriptive Results of Working Capital Management

The dependent variable of the study was working capital management. Descriptive statistics for the analysis are shown in *Table 2* below.

Table 2: Descriptive Results of Working Capital Management

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

Statements	SD	D	N	A	SA	Mean	Std. Dev.
The School sticks to the budgetary allocation	20.4%	19.0%	3.2%	22.6%	34.8%	3.32	1.59
All Schools are completed as Scheduled.	20.4%	14.0%	0.9%	33.9%	30.8%	3.40	1.53
There is transparency in resource utilization.	20.8%	12.2%	0.9%	35.3%	30.8%	3.42	1.53
Financial resources are accounted for	20.8%	12.7%	1.4%	43.4%	21.7%	3.32	1.47
Inventory management is adhered to	21.3%	15.4%	4.1%	36.7%	22.6%	3.23	1.49
Creditors are well managed	21.3%	19.5%	5.4%	40.3%	13.6%	3.05	1.41

| There is Banking of cash collected | 22.2% | 18.6% | 8.6% | 34.4% | 16.3% | 3.04 | 1.44 |
| **Average** | | | | | | **3.29** | **1.31** |

The dependent variable was also measured by seven statements. Out of the seven statements that were used to measure it, the respondents generally neither agreed nor agreed on whether completion rate of the construction schools was effective or not. This is shown by the weighted average means of 3.29.

Inferential Statistics

Correlational Results of Study Variables

In the present study, correlation was used to explore the relationship among a group of variables as suggested by Pallant (2010). A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense; a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables. A correlation coefficient of between 0.0 and 0.19 is considered to be "very weak", between 0.20 and 0.39 is considered to be "weak", between 0.40 and 0.59 is considered to be "moderate", between 0.60 and 0.79 is considered to be "strong" and between 0.80 and 1.0 is considered to be "very strong" Pallant (2010). The results of the correlation analysis are presented in *Table 3*.

Table 3; Correlation among Study Variables

Variables		X_1	X_2	X_3	X_4	Y
X_1	Pearson Correlation	1				
	Sig. (2-tailed)					
Y	Pearson Correlation	.719**	.585**	.654**	.768**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

Correlation analysis shows the direction, strength and significance of the relationships among the variables of study (Sekaran, 2000). The correlation analysis shows the direction, strength, and significance of the relationships among the variables of the study. A positive correlation indicates that as one variable increases, the other variables will also increase. On the other hand, a negative correlation indicates that as one variable increases the other variable decreases (Sekaran, 2003). As it can be inferred from *Table 3* above, there is a high correlation between the study independent variables X_1 and the dependent variable (*Y*).

Specifically, the association between risk assessment (*X_1*) and working capital management is positive and significant ($r = 0.719$; $p = 0.00$). This implies that for every unit increase in risk assessment, there is a positive increase of 0.719 in working capital management. However, this does not show causation.

Regression Results

The research used multiple regression analysis to determine the linear statistical relationship between the independent and dependent variables of this study. According to Young (2014), regression analysis helps to

explain the statistical relationship between variables thus enhancing the ability of the study to make substantive conclusions and recommendations. For the present study, the regression was run based on the predicted regression model below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mathcal{E}$$

Where:

Y = Working capital management

X_1 = Risk assessment

β_0, β_1 = Regression Coefficients for the independent variables

$\mathcal{E}$ = Error term, which was assumed to be normally distributed.

Table 4 presents the regression coefficient values (beta values) for the elements of risk response.

Table 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.775	.860		2.064	.000
	X_1	.205	.095	.251	2.165	.001

a. Dependent Variable: Y

From *Table 4* above, several inferences can be derived. The constant term in the regression equation of 1.775 indicates the level of working capital management that is present in the schools in Kuria East.

After the analysis, and based on the results from the analysis, the following model was fitted in the study;

$$Y = 1.775 + 0.205X_1$$

The first objective of the study was to establish the influence of control environment on working capital management in public secondary schools in Kuria East, Kenya. Results in *Table 4* shows that risk assessment practice (X_1) has a positive statistically significant effect ($\beta = 0.205$, $p = 0.000$) on working capital management in public secondary schools in Kuria East. This implies that holding all factors constant, a unit increase in risk assessment leads to a 20.5% significant increase in working capital management in public secondary schools in Kuria East. These results agree with those by Wanyonyi (2015) who conducted a survey on internal control practices and those Merna (2014) who found a positive association between internal control practices and project management. The results also agree with those by Koolwijk (2015) who also studied risk elements in two separate project partnerships between a customer and a contractor. The results of the study demonstrated a strong match between the risk items. In this study, Ahamed and Azhar (2014) evaluated modern risk assessment and management strategies adopted by Florida construction firms.

Summary

This study set out to generally establish the influence of internal control practices on working capital management in public secondary schools in Kuria East, Kenya. The specific objectives of the study was to determine the influence of risk assessment on working capital management in public secondary schools in Kuria East, Kenya. Based on correlation results, the association between risk assessment (X_1) and working

capital management was found to be positive and significant ($r = 0.719$; $p = 0.00$). Results showed that risk assessment has a positive statistically significant effect ($\beta = 0.205$, $p = 0.000$) on working capital management in public secondary schools in Kuria East. It is therefore concluded that the risk assessment practice is a statistically significant positive predictor of working capital management in public secondary schools in Kuria East.

It is recommended that; the Public secondary schools in Kuria East have in place alternative strategies for risk assessment, the Public secondary schools in Kuria East are incorporated with safety systems, that the auditors ensure that there are safety inspections on Public secondary schools in Kuria East being executed, that the Public secondary schools in Kuria East are implemented with detailed work plans in response to risk assessment , and that the risk assessment programs are well instituted in the schools.

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