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EFFECT OF ACCOUNT PAYABLE MANAGEMENT ON FINANCIAL PERFORMANCE OF PUBLIC UNIVERSITIES IN KENYA

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ABSTRACT

The financial performance of Kenyan universities has been declining to recent time where most of the universities reported deficits in their income statement, following the dwindling revenues universities are in a deep financial crisis that can possibly lead some of them to a halt. Auditor General declared 11 universities insolvent in a report to Parliament for financial year (2017/2018). Proper Accounts receivable management is essential for any organizational survival. This is because an institutions' inability to identify relevant accounts receivable management practices can be its source of inability to perform. The general objective of this study was to determine the Effect of Accounts payable management on financial performance of public universities in Kenya, which was guided by the following independent variables; effect of account payable turnover management on financial performance of public universities in Kenya, effect of account payable day ratio management on financial performance of public universities in Kenya, effect of coverage ratio management on financial performance of public universities in Kenya. The study was anchored on trade off theory, operating cycle theory, liquidity theory. The scope of the study was based on public universities in Kenya for period between years 2016 to 2019. Existing literature was reviewed in details in chapter two of the study. Quantitative research design was used in this study. The study population was 31 accredited public universities in Kenya. Secondary data was collected from the auditor general's office. The study found that accounts payable turnover management, accounts payable day ratio management, coverage ratio management as measures of accounts payable collective and individually affects financial performance of public universities in Kenya. The study revealed that student enrolment moderates the relationship between accounts payable management and financial performance of public universities in Kenya. Coefficient of determination $R^2 = 0.563$ shows that 53.6 percent of the variation in financial performance are accounted for by the changes in accounts payable management of public universities in Kenya. The study concluded that accounts payable management plays a significant role in financial performance of public universities in Kenya. The study therefore recommended that all public universities embrace accounts payable management in order to have sound financial performance. Further it is recommended that more research can be done on private universities in Kenya to facilitate generalization.

Key Words: Accounts Payable Management, Account Payable, Turnover, Coverage Ratio, Financial Performance

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BACKGROUND OF THE STUDY

Working capital is defined as the difference between short-term assets and short-term liabilities. Resources that an organization owns are the assets while all the outstanding debts like credits and loans are the organizational liabilities. Signer (2010) describes working capital as the cash available for the day-to-day operations in an organization. Increasing returns on assets (ROA) and minimizing the risk of going bankrupt is the main objective of a good management of both current assets and current liabilities. Mathur (2002) argued that working capital management involves controlling and planning the gross current assets as against the net working capital, which deals with the cash of an organization. Goods, services and merchandise paid for upon delivery, goods and services provided on credit, merchandise purchased on credit, and the short-term loans are the main aspects of working capital management. Managing working capital essentially entails managing the cash flow of a business on a daily, weekly and monthly basis in such a way that satisfies all debts while reserving enough capital to continue operations and the generation of profits.

Working capital management incorporates managing the organization's payables, receivables and inventory to contribute positively to the creation of a firm value and achieve a balance between risk and returns. Little investment increases the risk of not being able to meet commitments as and when they fall due while excessive investment in inventory and receivables reduces the profit. Whereas net working capital excludes current liabilities, working capital includes all the items as shown on organization's balance sheet as short term or current assets. To access the availability of funds to meet current operations of the organization, such measures are considered useful tools. Therefore, a concept that should be understood by every organization is the importance of maintaining an appropriate level of working capital and its contribution to business survival (Harris, 2005).

Working capital performance has a relationship with the overall performance of the concerned organizations and has been considered as the life-blood of any business. According to Hampton (2011), working capital policy is a function of two decisions which include the appropriate level of investment in current assets and the chosen methods of financing the investment. Moreover, Hampton argued further that in respect to the organization's total flow of funds and corporate structure, the level of organization's current assets and working capital is a tradeoff between risk and profitability. Aggressive working capital would be used whereby the organization should maintain a minimum level of debtors, securities and cash if there were little risk but a more conservative policy will be called for, requiring high stock reserves and high cash balances if there is little stability. Liquidity position is a major issue that must be put into consideration by financial managers in all organizations. According to Weinraub and Visscher (2012), liquidity state can be identified by their risk-return characteristics because risk and return tradeoffs are inherent in alternative working capital policies.

Finance always being disregarded in financial decision making since it involves investment and financing in short-term period. Further, also act as a restrain in financial performance, since it does not contribute to return on equity (Rafuse, 2014). A well-designed and implemented financial management is expected to contribute positively to the creation of an organizations' value (Padachi, 2006). Lazaridis and Tryfonidis (2006) argues that achieving desired trade-off between profitability, solvency and liquidity is a dilemma in financial management. Significant attention has been received in the subject of financial performance from scholars in areas of both strategic management and business management. Since financial performance has implications to organization's health and ultimately its survival, it has been the primary concern of business practitioners in all types of organizations. According to Naser and Mokhtar (2004), Efficiency and effectiveness of management is reflected by high performance in making use of resources of the company which leads to growth of the country's economy.

An efficient accounts payable management plays a significant role in overall corporate strategy in order to increase shareholder value (Dong and Su, 2010) by determining the composition and level of investments on

current assets, the level, sources and mix of short-term debts (Nwankwo & Osho, 2010). Especially an efficient accounts payable management can enable a firm to react quickly and genuinely to unexpected changes in economic environment and gain competitive advantages over its rivals (Alshubiri, 2011). To put it briefly, an efficient accounts payable management primarily aims to ensure an optimum balance between profitability and risk (Ricci and Di Vito, 2000). This objective can be achieved by continuous monitoring of accounts payable components.. The success of a firm heavily depends on the effective skills of financial managers (Filbeck & Krueger, 2005; Afza & Nazir, 2007).

Following the dwindling revenues, universities are in a deep financial crisis that can possibly lead some of them to a halt. Some of the universities are unable to submit statutory deductions to various agencies and pay lecturers and other university staff. This shows that they are hardly surviving and unable to meet financial obligations hence throwing the future of some of them into disarray. Lack of students for parallel programmes that formed the bedrock of the institutions' revenues is one of the major causes of these financial crises. This is after the university cut-off points were lowered to C+, offering a window of opportunity for all the form four leavers who scored above the minimum university entry grade to proceed to university under government sponsorship. Kenya Universities and Colleges Central Placement Services absorbed all students who scored a minimum of C+ in KCSE in both public and private institutions within the last two years. Auditor General declared 11 universities insolvent in a report to Parliament in year (2017). The affected universities included University of Eldoret, Pwani University, Embu University, Murang'a University, Multimedia University, Masinde Muliro University, Machakos University College, Laikipia University, Technical University of Kenya, Jomo Kenyatta University of Agriculture and Technology and University of Nairobi.

The 2018 audits indicated that current liabilities exceeded their current assets hence universities could not meet financial obligations. The auditor general report indicated that University of Nairobi utilized Sh147.6 million of its reserves, amassed Sh458 million debt, and was unable to remit Sh673.6 million statutory deductions from staff salaries. In financial year 2018/2019, National Treasury allocated only Ksh 4.7 billion to the university despite it expecting to receive over Ksh 7 billion. The university had requested for Ksh 18 billion from the 2018-19 budget to fund self-sponsored students and research. The university had a Ksh 2 billion deficit in the previous year. Financial crisis will be compounded further in our oldest public university due to this declined budgetary allocation. (Gok, 2018).

Kenyatta University, JKUAT, Egerton, and Moi University are other universities surviving on bank overdrafts to pay staff and run their affairs. According to the auditor general report (2018), management of Moi university failed to submit to the relevant agencies Ksh 598 million deductions made from staff to cater for loans and statutory. Another deducted fund but not submitted to agencies was Ksh 117 million for provident fund. The university is currently languishing in an estimated Sh1 billion deficit despite having about 23,500 students on government-sponsored programmes (Gok, 2018). Njoro-based Egerton University's bank had their accounts once frozen over workers' deductions arrears for insurance schemes and loans that have accrued to over Ksh 246 million. The 2017 and 2018 audit reports revealed that Ksh 127 million for the pension scheme and Ksh 122 million collected from staff as Sacco savings was not submitted to the relevant agent. The university also owes staffs loans and insurance schemes amounting to Ksh 250 million. The university also has Ksh500 million deficit (Gok, 2018).

On the other hand, Jomo Kenyatta University of Agriculture and Technology did not submit third-party deductions and statutory deductions close to Ksh 300 million. Kenyatta University (KU) is unable to furnish the newly constructed referral hospital so it can begin offering services and has had delayed salary payments. Players in the higher education sector agreed that universities, especially the big and older ones, are in serious financial crunch, and if not bailed out soon, will have massive ramifications on university education. Kenya Universities Staff Union secretary general said that no university has a sound financial base and that all are in a red line. He also argued that the most affected are the older universities like Kenya Methodist University,

Egerton, Moi University, Jomo Kenyatta University of Agriculture and Technology, Kenyatta University, University of Nairobi. He reported that huge workforce installed to run expensive academic programmes in big universities and the drastic reduction in capitation every financial year by the state is the main cause of this financial crunch. In his remarks which were also confirmed by the university, he stated that University of Nairobi has a monthly payroll deficit of Ksh 475 million because it only receives Ksh 395 million to cater for salaries despite paying Ksh 870 million every month. He pointed out that universities were left with big holes in their budgets when the exchequer funding was reduced. Mukhwaya said that Leave alone paying the third-party and statutory deductions, most mainstream universities cannot even sustain their payroll because they had their budgets drastically cut by the Treasury. As a result of the Treasury not releasing funds, Ksh 3.65 billion pension has not been paid by all universities for staff who retired since 2010. The national government promised to provide a pension component of Ksh1.95 billion to match the new salary increment provided in the 2010-2013 Collective Bargaining Agreement but up to date the money has not been wired into the institution's accounts. (GoK,2018).

Given that institutions are seriously underfunded that they cannot support their budgets, questions should be raised on how heads of these institutions are able to sustain them all year round (Gok, 2018).

Statement of the Problem

The financial performance of Kenyan universities has been declining to recent time where most of the universities reported deficits in their income statement, following the dwindling revenues universities are in a deep financial crisis that can possibly lead some of them to a halt. Auditor General declared 11 universities insolvent in a report to Parliament for financial year (2017/2018). It is necessary for all institutions to manage their liquidity well. Institutions are likely to encounter cash shortages that leads them to experience problems of paying its obligations when they fall due if it does not manage its liquidity well. According to Rafuse, (2014), if working capital starvation is not the main cause of various institutional failure in many developing as well as developed countries, it has been generally credited as the major cause. Working capital management is important because of its effect on the organization profitability and risk, and consequently its value. A very significant position of total assets is represented by investments in current assets. Small and growing institutions lacks a well-established long-term financing mechanism. Therefore, this makes a good working capital management critical for them because they must finance their current assets adequately. In addition, there is risk-return trade off; in that the optimal level calls for a balance between profitability and solvency by minimizing the total costs of liquidity and cost of illiquidity, the working capital management objectives being enhancing profitability and liquidity (Pandey, 2008). Differences in financial ratios and averages between industries were examined by the work of (Huefner & Gupta, 2010). In the organizations where many financial executives are struggling to identify the basic working capital drivers and an appropriate level of working capital, working capital management has become one of the most important mechanism to be practiced. Working capital management strategic importance has encouraged several researchers to maintain their focus on finding out the relationship between working capital management and profitability (Samiloglu & Demirgunes, 2008; Uyar, 2009). Because most of the previous studies focused on developed economies, additional insights could be provided through investigating this issue and perhaps different evidence on working capital management in public universities in Kenya could be unearthed.

Working capital management and financial performance have also been studied locally in Kenya. The following studies have been done locally; Waweru (2011) carried out a study on the relationship between working capital management and the value of the companies listed at the NSE. The study found that there is a statistical relationship between efficient working capital management and the value of firms quoted at the NSE. Mutungi (2010) carried out a study on the relationship between working capital management and financial performance of oil marketing firms in Kenya. From the correlation analysis, the study concluded an existence of aggressive working capital policy in the oil sector. Kithii (2008) carried out a study on the relationship between working capital management and profitability of listed companies in the NSE. A

significantly negative relationship between cash conversion cycle and profitability was found through a Pearson's moment correlation of co-efficient. Nyakundi (2010) carried out a study on working capital management policies among public companies in Kenya. The concluded that there was no relationship between working capital management and profitability after a simple linear regression was run.

The studies showed that there were few studies that were done to find out the effect of cash management on universities financial performance, despite the financial distress the universities have been facing over recent years in Kenya. Therefore, the study sought to find out the effect of accounts payable management on financial performance of public universities in Kenya, guided by the following specific variables; effect of accounts payable turnover management on performance universities in Kenya, effect of accounts payable day ratio management on performance universities in Kenya, effect of coverage ratio on performance universities in Kenya and the effect of student enrollment on the relationship between accounts payable management on financial performance of universities in Kenya.

The Study Objectives

The main objective was to establish the effect of accounts payable on financial performance of public universities in Kenya. The study's specific objectives were;

- To establish the effect of accounts payable turnover on financial performance of public universities in Kenya
- To find out the effect of accounts payable day ratio management on financial performance of public universities in Kenya
- To determine the effect of coverage ratio management on financial performance of public universities in Kenya
- To establish effect of student enrollment on the relationship between accounts payable management on financial performance of universities in Kenya

The study was guided by the following hypotheses:

- **H₀₁**: There is no significant relationship between accounts payable turnover management and financial performance of public Universities in Kenya
- **H₀₂**: There is no significant relationship between accounts payable day ratio management and financial performance of public Universities in Kenya
- **H₀₃**: There no significant relationship between coverage ratio management and financial performance of public universities in Kenya
- **H₀₄**: There is no significant moderating effect of student enrollment on the relationship between accounts payable management on financial performance of universities in Kenya

LITERATURE REVIEW

Theoretical Review

Trade off Theory

According to this theory developed by Kraus and Litzen Berger in 1973 refers to the idea that there exists tradeoff between profitability and liquidity. It argues that gaining more of one means giving up some of the other. At one end, there are firms, which are highly profitable but are liquid while on the other end there are firms, which are not very profitable but are liquid. Determining where the firm should reside in the middle ground is the basic challenge (Bhandari & Maiti, 2007). Developing dynamic structural trade-off models is the main objective of the Proponents of trade-off approach. Also, provision of a unified framework that can simultaneously account for many facts is the main attractive feature of these models. According to Jeng & Han (2006). Organization's well-being is promoted by a well-managed working capital in terms of liquidity and it also acts in favor for the growth of shareholders' value.

Working capital involves a balance/tradeoff between risk and profitability because investment decision that leads to increase in profitability will be inclined to increase risk and vice versa. Firm's cash flow is increased through efficiency in managing working capital. Further, it raises the firm's growth opportunities hence increasing the shareholders' returns. Working capital management significance is well known in the finance literature. Largay and Stichney (1980) reported in their study that W.T. Grant, a nationwide chain of department stores was bankrupt because of deficit in cash flows from operations in eight of the last ten years of its corporate life. Working capital management is a continuous function, which is linked to the survival of firms. According to Dong and Su, (2010), Organizations cannot survive for long if working capital management is not given due consideration.

Conceptualization

Conceptual framework briefly describes the topic being studied with a visual representation or graphical representation of all variables under study (Orodho, 2012). Conceptual framework helps in understanding why we are doing a project in a particular way (Kothari 2003). The conceptual framework of this study included four independent variables, one moderating variable and one dependent variable. Independent variables are variables that cause, affect or influence an outcome. Moderating variable changes the direction and strength of the relationship between independent variable and dependent variable. Dependent variable is the one being predicted or the outcome. The main objective for this study was to determine the effect of accounts payable management on financial performance of public universities in Kenya, guide by the following specific objectives; effect of accounts payable day ratio management on finance performance of public universities in Kenya; effect of accounts payable turnover management on finance performance of public universities in Kenya; effect of coverage ratio management on financial performance of public universities in Kenya and the effect of student enrollment on the relationship between Cash management on financial performance of public universities in Kenya.

Empirical Literature

In Kenya Kithii (2008) carried out a study on the relationship between working capital management and profitability of listed companies in Nairobi securities exchange. The objectives were to establish how efficient the firms are managing their working capital; establishing the relationship between profitability, the cash conversion cycle and its components for the listed companies in the Nairobi securities exchange for the period 2001 – 2006. The results showed that there is statistically significant negative relationship between indicators of working capital management and the profitability of firm except for the average payment period which showed a positive relationship.

Mutungi (2010) carried out a study on the relationship between working capital management and financial performance of oil marketing companies in Kenya. The study was inspired by the fact that working capital in any firm is extremely critical and requires conscious balance between the components on the working capital namely cash, receivables, payables and inventory. The objectives of the study were to establish the working capital management policies among oil marketing firms in Kenya and to examine the relationship between working capital management and profitability in oil marketing firms in Kenya. From the correlation analysis, the study concluded an existence of aggressive working capital policy in the oil sector. Nyakundi (2003) studied working capital management policies among the public companies in Kenya. From a sample of 30 companies quoted at the NSE covering the period from 1998 – 2002, he concluded that most companies practiced the aggressive working capital management policy. No significant differences were noted between the working capital management policies across the five sectors. Further there were no significant differences in return on equity among companies that practice different working capital management policies. From a simple regression analysis, the study found no relationship between the working capital management policies and return on equity.

Ochieng (2006) carried out a study on firms quoted on the NSE over the last twenty (20) years on the relationship between working capital and the economic activities in Kenya. The objective of the study was to examine how the changes in economic activities affect changes in working capital by firms listed on the NSE. The findings revealed that the liquidity of the small firms as measured by the current and quick ratios increased slightly during economic slowdown. The study also shows that the liquidity positions reacted differently to various economic indicators such as inflation and lending rates. With lending rates, the study found that lending rates indeed did affect the amount of working capital for the firms and this further showed that during times of economic contraction, working capital positions of the firms improved. Waweru (2011) carried out a study on the relationship between working capital management and the value of companies quoted at the NSE. The study used secondary data obtained from annual reports and audited financial statements of companies listed on the NSE. A sample of 22 companies listed on the NSE for a period of seven years from 2003 to 2009 was studied. The average stock price was used to measure the value of the firm. The regression models indicated that there was some relationship between working capital management and the organizations value while the result of the Pearson correlation indicated a negative relationship between average cash collection period, inventory turnover in days, cash conversion cycle and the value of the firm.

METHODOLOGY

This study was guided by epistemology (what is known to be true) research philosophy. According to Galliers, (1991), interpretivist and positivist are the main research philosophies that have been identified. This study adopted a quantitative research design. The entire population of study was 31 accredited public universities in Kenya. This study used the census since the entire target population was used in the study. Data sources for the study were secondary data. The data was obtained from the office of Auditor General whose mandate is to audit the financial statement of public entities. The financial statements were obtained from the Auditors general office. The audited annual financial statements provided secondary data.

Cronbach's Alpha was used to test Internal consistency because it measured how closely related a set of items are as a group. For data analysis, the collection sheet quantitative data was keyed into a computer software called SPSS (statistical package for social sciences) after being edited, blank responses handled, coded and categorized ready for analysis.

To verify whether the captured data correlates with the data-captured into SPSS the dataset was subjected to a verification process. SPSS version 20 was used to run the descriptive statistics. After analysis, both descriptive and inferential statistics was generated. According to Zikmund (2011), descriptive statistics involved calculating percentage and frequency distribution. Mean and standard deviations were used to measure central tendencies and dispersion respectively. The relationship between dependent and independent variables was determined through a regression analysis. Correlation analysis determines the association between the variables. Multiple linear regression model tested the influence of each independent variable on the dependent variable for each of the years and the overall. The ability of multiple linear regression model to measure or test the variables correlation effect justified its use. The main variable was linked to specific variables by the regression model shown below

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$$

Where by:

Y– Universities financial performance in Kenya

β_0 – Constant

X_1 – Accounts payable turnover management

X_2 – Accounts payable Day ratio management

X_3 -Coverage ratio management

ϵ = Error term

This study carried out normality test, multicollinearity test, homogeneity test and autocorrelation test.

FINDINGS AND DISCUSSIONS

The study sought to address the objectives by use of collection data sheet, out of the accredited 31 public universities, information on 26 public universities was obtained, which represented 83.8% response rate, which was considered appropriate and enough for the study conclusions, Babbie(2010) and (Mugenda and Mugenda 2003), asserted that 50% and above response rate was considered adequate and above 70% and above was rated very good, hence the response rate for the study was adequate.

The reliability of the data collection sheet was derived by computing the Cronbach's alpha coefficient. The Cronbach's alpha estimates internal consistence find out how items on a test relate to others and to the total, its expressed as a coefficient of 0 to 1.0, where a higher coefficient indicate a more reliable test (Ngugi,2013). The Cronbach alpha for each variable was presented in Table 1.

Table 1: Reliability Test

variables	Cronbach alpha
Financial Performance	0.882
Accounts payable management	0.975
Student enrolment	0.855

The results in Table 1 indicated that, financial performance had a Cronbach Alpha coefficient of 0.882, Accounts payable management had a Cronbach Alpha coefficient of 0.975 and student enrolment had a Cronbach Alpha coefficient of 0.855. All the variables used in the study had a Cronbach Alpha coefficient greater than 0.7, which implied that all variables were reliable. The use of threshold of $\alpha > 0.7$ was supported by the fact that several other previous studies had adopted it in their determination of reliability upon obtaining a value, which was greater than 0.7, hence declared their variable as being reliable (Memba, 2011).

Diagnostic test is used to evaluate the model assumptions and investigate whether or not there are observations with a large, undue influence on the analysis. This study carried out normality test, multicollinearity test, homogeneity test and autocorrelation test. Violation of these assumptions means that the forecasts, confidence intervals and scientific insights yielded by the regression model would be inefficient or extremely biased and misleading.

Parametric tests require normal data. When data is not normally distributed it may distort the results of any further analysis. Teste of normality was conducted using shapiro wilk test. According to Tabachnik and Fidell (2007), P-value > 0.05 shows that the data fits a normal distribution. The results are presented in Table 2.

Table 2: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Performance	.158	26	.095	.892	26	.074
Accounts payable management	.191	26	.056	.763	26	.052
Student enrolment	.214	26	.055	.500	26	.062

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

As indicated in Table 2, each of the study variables was normally distributed, that is, financial performance (P-value = 0.074 $>$.05), accounts payable management (P-value = .052 $>$.05) and student enrolment (P-value = .062 $>$.05) respectively. This implied that the data was suitable for further regression analysis.

Multicollinearity refers to high correlation between the independent variables. This test was based on variance inflation factor and tolerance values. Variance inflation factor <10 and tolerance>0.1 implies that the variables are not highly correlated. The findings are presented in Table 3.

Table 3: Multicollinearity Test

	Collinearity Statistics			Variance Proportions			
	Tolerance	VIF	Condition Index	Accounts receivable management	Accounts payable management	Inventory management	Cash management
Accounts payable management	.780	1.283	2.956	.24	.00	.25	.05
Student enrolment	.675	1.481	4.016	.35	.07	.45	.12

The results revealed that VIF values were less than 10 and tolerance values greater than 0.1. these are within the thresholds. Thus, the data did not suffer from multicollinearity. It implies that all the five variables could be used in the regression model.

Homogeneity test (homoscedasticity or heteroscedasticity) was tested to establish whether or not the variance for the variables were constant. Levene’s test of homogeneity of variances was used. Gastwirth et al., (2009) argued that levene statistic is significant if p-value > 0.05 (equal variance of errors). The findings are presented in Table 4.

Table 4: Test of Homogeneity of Variances

Variables	Levene Statistic	df1	df2	Sig.
Accounts payable management	3.452	5	20	0.065
Student enrolment	4.092	5	20	0.066

As indicated in Table 4, p-values of Levene’s test of homogeneity of variance were greater than 0.05 for each variable. The test was thus, significant at $\alpha = 0.05$. this confirmed the presence of homoscedasticity. The assumption of constant variance of error (homoscedasticity) was satisfied.

Autocorrelation is the similarity of a time series over successive time intervals. It can lead to underestimates of the standard error. A rule of thumb is that test statistic values in the range of 1.5 to 2.5 are relatively normal. The results are presented in Table 5.

Table 5: Durbin Watson Test

Model	Durbin-Watson
Accounts payable management	2.457 ^a
Student enrolment	2.131 ^a

- a. Predictors: (Constant), Accounts payable management,
- b. Dependent Variable: Financial Performance

As shown in Table 5, Durbin Watson values are all less than 2.5 and lies in the range of 1.5 to 2.5. it therefore means that the data did not suffer for autocorrelation problem, thus, no serial correlation over the time interval 2016 through 2019.

Correlations for Study Variable

Correlation is used to test the magnitude and direction of the relationship between the dependent and independent variables. Pearson’s correlation ranges between -1 and +1. the closer the correlation values to -1 or +1 the greater the indication of association. When correlation values are not close to 1 or -1 it indicates that

the factors are sufficiently different measures of separate variables (Farndale, Hope-Hailey & Kelliher, 2010). The results are presented by the correlation matrix in Table 6.

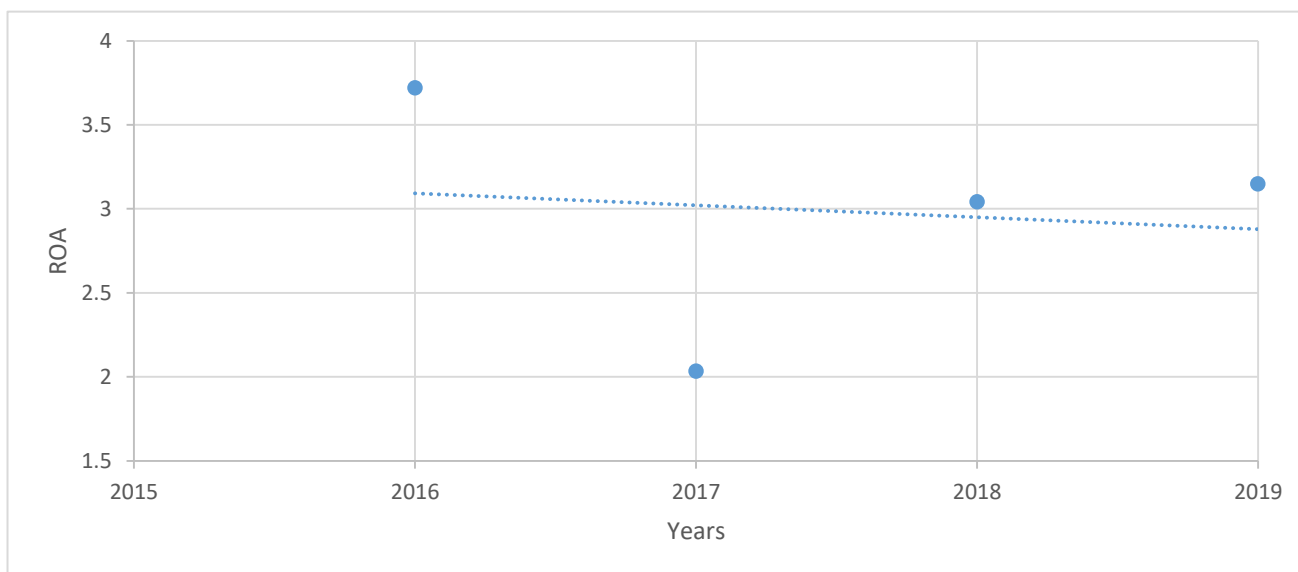
Table 6: Correlations of the Study Variables.

		Financial Performance	Accounts receivable management	Accounts payable management	Inventory management	Cash management	Student enrolment
Financial Performance	Pearson Correlation	1					
	Sig. (2-tailed)						
Accounts payable management	Pearson Correlation	-.251	.153	1			
	Sig. (2-tailed)	.009	.002	.455			
Student enrolment	Pearson Correlation	.014	.214	.332	.345	0.145	1
	Sig. (2-tailed)	.008	.469	.313	.379	0.123	

The findings indicated, accounts payables was negatively associated with financial performance. Further accounts payable management ($r = .025$) and student enrolment ($r = .014$) respectively.

Trend Analysis

Trend analysis is a technique used to predict future movements based on recently observed trend data. The study variables were presented using a trend analysis for a period of 2016 through 2019. It indicated that return on assets had a downward trend over the period 2016 through 2019. While accounts payable had an upward trend over the period between 2016 through 2019.



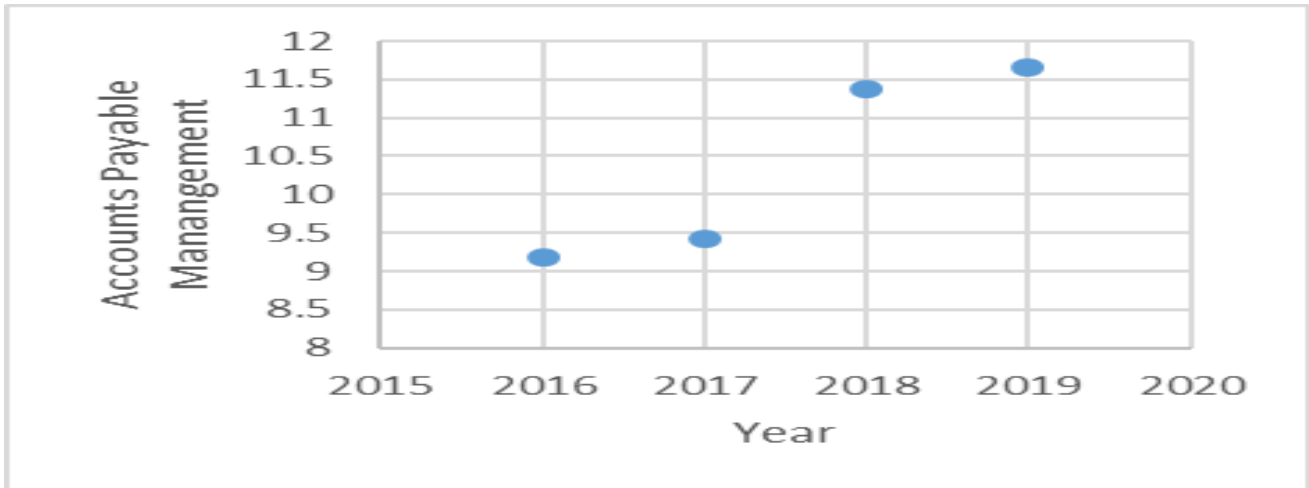


Figure 1: Trend Analysis

Regression Analysis Results

Effect of Accounts payable Management on Financial Performance

The study sought to determine the influence of accounts payable management on the financial performance of public universities in Kenya. To achieve this objective, the study carried out a linear regression analysis. The results are presented in Tables 7, 8 and 9.

Table 7: Model Summary before moderating variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.739 ^a	.547	.539	.70996	.547	3.139	3	22	.046

a. Predictors: (Constant), CR, APDR, APT

The results in Table 7 showed that the value of R is 0.739. This implied that there is a strong positive linear relationship between accounts payable management (account payable turnover, account payable day ratio, coverage ratio) and the financial performance (ROA) of public universities in Kenya. The value of R square is 0.547, which represent the explanatory power of the independent variable (accounts payable management) on the dependent variable. This means that 54.7 percent of the variations in financial performance (ROA) is explained by accounts payable management in public universities in Kenya leaving 45.3 percent of the financial performance (ROA) accounted by other factors not in the model (error term).

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.746	3	1.582	3.139	.046 ^b
	Residual	11.089	22	.504		
	Total	15.835	25			

a. Dependent Variable: ROA

b. Predictors: (Constant), CR, APDR, APT

The overall significance of the model was tested using ANOVA. The findings showed that $F = 3.139$, $P\text{-value} = 0.046 < 0.05$. This means that the model was significant in overall. This leads to the signifies that, at 5% significance level, accounts payable management has influence on the financial performance of public universities in Kenya.

Table 9: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.668	.298		5.590	.000	1.049	2.287
	APT	-.152	.056	-.593	-2.699	.013	-.269	-.035
	APDR	-.002	.001	-.524	-2.559	.018	-.003	.000
	CR	.015	.010	.296	1.499	.148	-.006	.035

a. Dependent Variable: ROA

The study sought to determine the predictive model of accounts payable management on financial performance of public universities in Kenya. This was based on the coefficients of the indicators of accounts payable management. The predictive model was as follows;

$$ROA = \beta_0 + \beta_1 APT + \beta_2 APDR + \beta_3 CR + \epsilon$$

Where:

ROA – Universities financial performance in Kenya

β_0 – Constant

APT – Account payable Turnover

APDR – Account payable Day ratio

CR - Coverage Ratio

ϵ = Error term

From the results in Table 9, the following regression model was obtained

$$ROA = 1.668 - 0.152 APT - 0.002 APDR + 0.015 CR$$

The coefficients indicated that; for every one unit increase on account payable turnover, Financial performance of public universities in Kenya decreases by 0.152 units holding other factors constant; for every one unit increase in accounts payable day ratio financial performance of public universities in Kenya decreases by 0.002 units holding other factors constant and for every one unit increase in current ratio, financial performance of public universities in Kenya increases by 0.015 units holding other factors constant. All the Indicator were individually significant except current ratio since their p-values were less than the critical value of 0.05.

Table 10: Model Summary after moderating variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.750 ^a	.563	.561	.78634	.563	4.846	1	24	.002

a. Predictors: (Constant), APM

Table 10 shows that the combined influence of accounts payable management on financial performance. The findings indicated that correlation coefficient between accounts payable management and financial performance was $R = 0.750$. This means that accounts payable management has a strong correlation with financial performance. Coefficient of determination $R^2 = 0.563$ shows that 53.6 percent of the variation in financial performance are accounted for by the changes in accounts payable management leaving 46.4 percent accounted for by other factors not included in the study.

Table 11: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.995	1	2.995	4.846	.002 ^b
	Residual	14.840	24	.618		
	Total	17.835	25			

a. Dependent Variable: ROA

b. Predictors: (Constant), APM

The results in Table 11 tested overall significance of the model. Analysis of variance (F = 4.846, P-value = 0.002<0.05) confirmed that the model was statistically significant in overall.

Table 12: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.201	.244		4.915	.000	.697	1.706
	APM	-.003	.002	-.251	-1.269	.002	-.007	.002

a. Dependent Variable: ROA

The results in Table 12 indicated that accounts payable management was statistically significant ($\beta = -0.251$, $t = -1.269$, P-value = 0.002<0.05). Thus, the hypothesis that accounts payable management has significant effect on financial performance was supported. Beta coefficient for accounts payable management suggest that for every one unit increase in accounts payable management, financial performance (ROA) of of public universities in Kenya decreases by 0.251 units holding other factors constant. the predictive model of financial performance (ROA) on accounts payable management was of the form;

$$FP (ROA) = 1.201 - 0.251 APM$$

Where FP is Financial Performance (ROA) and APM is Accounts Payable Management

Summary of Hypothesis Testing Results

H₀₁: There is no significant relationship between account payable management and financial performance of public Universities in Kenya

The explanatory power (R^2) was 0.563. This shows that 53.6 percent of the variation in financial performance are accounted for by the changes in accounts payable management leaving 46.4 percent accounted for by other factors not included in the study. Accounts payable management was statistically significant ($\beta = -0.251$, $t = -1.269$, P-value = 0.002<0.05). Beta coefficient for accounts payable management suggest that for every one unit increase in accounts payable management, financial performance (ROA) of of public universities in Kenya decreases by 0.251 units holding other factors constant. Null hypothesis was rejected and concluded that there is a significant relationship between account payable management and financial performance of public Universities in Kenya. The findings support those of Kithii (2008) who found a significantly negative relationship between accounts payable management and profitability, which was found through a Pearson's moment correlation of co-efficient.

CONCLUSIONS AND RECOMMENDATIONS

The objective of the study was to establish the effect of accounts payable management on financial performance of universities in Kenya. The study was supported by the following specific objectives; to establish the effect of accounts payable management on financial performance of public universities in Kenya; to find out the effect of accounts payable day ratio management on financial performance of public

universities in Kenya; to determine the effect of Coverage ratio management on financial performance of public universities in Kenya and to establish the moderating effect of student enrollment on the relationship between accounts payable management on financial performance of universities in Kenya. The study used a quantitative research design. The study used the census since the entire target population (31 accredited public universities in Kenya) was used in the study.

The study established that a strong relationship existed between accounts payable turnover, accounts payable day ratio, coverage ratio and financial performance of public universities in Kenya. Accounts payable turnover management had the greatest negative influence on financial performance of public universities in Kenya, followed by coverage ratio and accounts payable day ratio ratio respectively.

The study set out to establish the effect of accounts payable management on financial performance of universities in Kenya. The study concluded that accounts payable measured by accounts payable turnover management, accounts payable day ratio management and coverage ratio management influences financial performance of public universities in Kenya. There was a negative significant relationship between accounts payable turnover management, accounts payable day ratio management, and positive significant influences of coverage ratio on financial performance of public universities in Kenya. The study concluded that accounts payable negatively significantly influence financial performance of public universities in Kenya. this shows that when accounts payables are not properly management then public universities will have difficulties in their finances. Lastly, the study concluded that student enrollment has a significant moderating effect on the relationship between accounts payable management and financial performance of public universities in Kenya.

The study aimed at establish the effect of accounts payable management on financial performance of universities in Kenya. The findings of the study are expected to have an implication for theory and practice.

The study contributes to theories by supporting trade off theory by linking all study variables working capital indicators to financial performance. according to trade off theory, working capital involves a balance/tradeoff between risk and profitability because investment decision that leads to increase in profitability will be inclined to increase risk and vice versa. It also supports operating cycle theory; in that it provides a linkage between cash management and financial performance. The study further supported liquidity theory, in that liquidity is an important factor in determining working capital policies and indicates firm's capability of generating cash in case of need. In line with Baumol's Cash Management Model, the study posits that working capital when combined with student's enrollment may lead to improvement on financial performance of universities in Kenya. By using Baumol's Cash Management Model, an organization can determine the optimal cash replenishment level.

Education sector in Kenya is of great importance hence the findings of this study are expected to be of great significance in relation to existing literature in the areas of financial performance practices. The study findings are expected to help financial managers at the universities in planning their accounts payable management in this competitive market environment characterized with challenges of government capitations. This will make policy makers identify the best financial management practices that leads to organization performance. The results of this study are expected to enlighten working capital indicators and how they impact of sound financial management. it is further expected to shed light on how to identify basic competencies required in order to improve financial performance.

Suggestions for Further Studies

This study used quantitative research design; future studies should use other research design such as descriptive cross-sectional research design. Further studies should use triangulation so as to get more information. The study relieved on secondary data, future studies should incorporate both primary and secondary data. It is also suggested that future studies should test the mediating effect on the relationship

between working capital and establish the effect of working capital management on financial performance of universities in Kenya. Further studies should be conducted in private universities and the results be compared for the purposes of generalization. This study used return on assets as a financial measure of performance; future study should use other financial and non-financial indicators of performance measurements.

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