

Effect of Working Capital Management Practices on Financial Distress of Public Universities in Kenya

Shavulimo, Paul¹, Dr. Damianus Okaka², Dr. Margeret Atieno³

¹Kaimosi Friend University, School of Business and Economics, P.O Box 385 Kaimosi

²Kaimosi Friend University, School of Business and Economics, P.O Box 385 Kaimosi

³Kaimosi Friend University, School of Business and Economics, P.O Box 385 Kaimosi

Abstract

Financial distress refers to a state when an individual or a company is unable to meet its obligations at the time they are due. Most public Universities are financially challenged to fund their daily requirements and have also defaulted in honoring their debts. There are a lot of studies that have focused on the private enterprises while many other studies do not correlate financial management practices and distress in public universities. The main purpose of this research was to analyze the impact of working capital management on financial distress in Kenyan public Universities. The study also aimed at establishing the moderating role of internal governance on the relationship between working capital management and financial distress of public universities in Kenya. This study was based on the Walkers' three preposition theory. Hence, the research philosophy adopted in the study was pragmatism. This study used a mixed research approach for the assessment. The target population included internal auditors, finance officers, ICT officers, and deputy vice chancellors of finance and administration in the 35 public universities in Kenya. The data was gathered through census from the target group of population. The independent variable was collected through questionnaires while the dependent variable was obtained from secondary sources. Cronbach's alpha was used to check reliability. Validity of the instrument was checked by factor analysis and experts. In analysing the data, descriptive statistics such as means, standard deviation and variance were used. Inferential statistics used were correlation analysis and multiple regression analysis with the aim of establishing the relationship between the selected financial management techniques and financial distress. This research revealed that the financial management practices account for 54.5% and 59.4% of the variance in financial distress with and without the moderating influence of internal governance practices respectively. Regression analysis showed that working capital management had a negative impact on the level of financial distress which was estimated to be -0.129 with no moderating influence of internal governance practices and -0.161 with moderating influence of internal governance practices. The result of the study also showed that working capital management interacted with internal governance practices had a negative and significant influence on financial distress. The study therefore recommended that public universities should develop appropriate cash management policies that would enhance effective utilization of the funds and that risk management measures should be put in place and cultures of good internal governance should be enhanced. The study recommendations will assist in the formulation of laws and policies that may be useful in addressing problems of financial challenges in the education sector especially the public universities. To the academic scholars the study will serve as a source of empirical literature and basis for further research on the financial management practices and financial distress.

Date of Submission: 07-07-2025

Date of Acceptance: 17-07-2025

I. Background of the study

Financial distress is a situation where a corporation faces some difficulties in meeting its obligations as and when they come due or meets them with a lot of strain. It is usually accompanied by weak cash flows, reduction in revenues, losses and meager growth in the fundamentals that support the institutions profitability (Minyoso & Otuya, 2023). Habib and Kayani, (2022) noted that this leads to great economic implications. In many cases, prior to failure, there is some measure of ambiguity and the financial situation of the business is thought to be that of financial trouble.

It is quite surprising to note that today's universities face various financial problems to a varying level of severity. They are in a bad financial position in meeting their daily needs and importantly, the short and long term commitments. Several authors have established that poor financial management practices as the main reason for most public sector institution failures in terms of financial problems, credit mismanagement, and absence of long-term cash for daily operations and capital (Lane & Milesi, 2018).

A cash strapped university of higher learning often finds itself in a fix whereby they are unable to meet their financial obligations in as much as they are due. If prolonged it will compel the owing entity to declare bankruptcy or be compelled to undertake forced liquidation. This is made worse by the fact that financial institutions regard such organizations in this position as being non-credit worthy (Mwariri, 2020).

This is because financial distress in learning institution has greatly affected many Kenyan universities. University of Nairobi failed to remit Sh. 673.6 million of statutory deductions from the staff remuneration for the fiscal year 2018/2019, and outstanding statutory obligations stood at Kshs 6.73 billion. According to some reports, public Universities are in a position where they have not paid their bills amounting to Kshs 45 billion and this figure is likely to rise in the future since the government compels universities to look for other sources of financing their operations independently (Commissioner for University Education Report, 2019).

Business distress is a phenomenon that has been explored in many countries across the world. The topic is progressively becoming a much more complex concept, as seen by many organizations, which at some point are deemed steady in the long run, only to face challenges and insolvency (Muigai & Muriithi, 2017). If this financial distress is not well managed, then it may lead to bankruptcy. Every economy, company, or business entity can be faced with the rather unpleasant situation of a financial crisis that leads to bankruptcy. It also has a negative impact on the overall economic performance of the economy as well as individual institutions (Madhushani & Kawshala, 2018).

Hence, the management of the University needs to look for ways of improving its resources in order to continue expanding and financially sustaining itself. Today, the governments and the funding agencies expect universities to design, implement, and adapt their financial management policies in the shortest time possible. To reduce risks and increase their funding, universities need to develop and implement efficient financial management strategies.

Working capital management includes the coordination, control and handling of all working capital assets including cash, balances, inventory, receivables, payables, overdrafts and short term loans (Boisjoly, Conine & McDonald, 2020). The management information system entails the Information and Communication Technology infrastructure to convert the economic data into financial information required by the University and to also relay information of the entity to various users (Guha & Kumar, 2018).

Management of liquidity in many firms across the United States can be improved through improved management techniques. The actual financial position of the organisation should be the key reference for the management of the risks. Liquidity and solvency are regarded to be significant in ensuring that the service delivery in public organizations is enhanced (Olang, 2021). The universities in Ghana experience several inefficiencies in the short-term oriented management of fees, inventories, cash and accounts payable, which negatively impact the performance of the universities. Also, a lack of planning on the working capital component leads to more operating costs. The budgeting and working capital management in these institutions will highly depend on quantitative data that must be accurate and timely to foster the right decisions.

Most institutions have policies that govern working capital practices but there is a violation of these policies. These policies should be reviewed from time to time in order to fit into the changing trends, there should be better management of working capital that should lead to increased operating efficiency. This can be done by ensuring that one has good records of each working component, ensuring that cash flows are planned and controlled well to enhance the liquidity and ensuring that the levels of each working components are ideal. This can help to support people who are in financial troubles (Amponsah & Asiamah, 2021).

Understanding the concept of working capital management will help Universities in Nigeria to minimize on risks in their operations while improving their performance. Therefore, a company may opt for an aggressive operational finance position with low current asset to total asset or it may opt for high current liability to total liability financing of the company. Current liability levels that are too high can negatively affect organizations because they make it impossible to meet daily operational needs as most of the finances available are to be used to settle those pending liabilities, while current asset levels that are too low might cause reduced levels of liquidity, which make it difficult to maintain efficient operations. It was stressed that the major goal of working capital management procedures is to keep each of the working capital components in optimal balance (Akbar, Jiang, & Akbar, 2022).

Financial distress in the Kenyan education sector has been a concern to many public and private universities. Due to effects of the current economic crisis, public Institutions are under pressure in many ways. This economic crisis has led to financial strain to most Universities especially those that are public. Nevertheless, the importance of extension of tertiary education particularly to the university level is vital to the economic development of a country. It is evident that more investments in higher education translate into a higher growth rate of the nation. However, this expansion requires large funds that cannot be sourced from parents or the students themselves especially during a period of economic downturn. Hence, governments should not plan to cut budgets in the public Universities in order to manage the financial crises within these institutions (Kenya Economic Report, 2022).

Self sponsored students' enrollment has been affected by factors such as inadequate government capitation and the government ban on fee increases, which has put many public Universities in a precarious financial position. The Universities currently receive an average of Sh130, 000 per student in capitation but recent estimates have shown that they require twice that amount to cater for their ever increasing needs. Most of the Universities are fully dependent on tuition fees, these university are burrowed up to Sh7 billion, due to this, it triggers some Universities to consider measures that are austerities in nature and which in the long run affects their functioning and quality of service delivery (Commissioner for University Education Report, 2019)

As stated in the Commissioner for University Education Report (2019), there is outstanding emoluments that include salaries and allowances that amount to 2.5 billion shillings agreed in the 2013-2017 CBA. Universities are still struggling financially, for the last five years, the development budgets were cut down with the most in the 2015/2016 and 2017/2018 financial years where the budget was cut by 50 percent and 70 percent respectively.

In Kenya, the Ministry of Finance has played a major role in promoting and supporting the improvement of financial management systems. The ministry has embarked on several reforms in the public financial sector with the objective of improving efficiency, accountability, and effectiveness in the use of resources, availability of timely information through real time payment and audit trails. The ministry has helped increase the overall accountability of the public funds and resources and has exponentially impacted on the delivery of services to the public thus enhancing the public service to align with Kenya's development goals (Martins, Branco, & Goncalves, 2019).

Statement of the problem

This study documents that the Kenyan public universities continue to operate in a financial precariousness with unpaid expenses. For instance, the University of Nairobi could not remit statutory deductions of Kshs 673, 600, 000 from staff salaries in the financial year 2018/2019, which has now accumulated to Kshs 6 billion. The outstanding balances amounting to about Kshs 45 billion is the total unpaid balances across all public universities in Kenya and there is likelihood that this figure is likely to increase as the government continues to direct universities to look for other sources of funding to support their operations. These budget deficits and financial pressures are increasing within these institutions thus the need to address it. It has been revealed that universities such as Egerton University with a total of Kshs 4.5 billion in debts have considered ways of downsizing to achieve operational balance. In this regard, some universities are seeking various funding mechanisms such as raising student fees. Most past studies on financial distress have mainly targeted commercial banks, manufacturing firms, county governments, parastatals, and tertiary colleges, while little or no attention has been paid to public universities. Recent literature on financial management in the public sector tends to provide general conclusions while little or no attention is paid to examining the specific relationship between the various policies and financial trouble. However, the role of internal governance in reducing financial distress has not been investigated in detail. This research aims to fill this gap by assessing the effects of working capital management on financial distress in Kenyan public universities with a view on the moderating effect of internal governance. Solving this problem will produce the recommendations that can help public universities to reduce their financial problems and increase their financial stability.

Objectives of the Study

- i.To assess the effect of working capital management practices on financial distress of public Universities in Kenya.
- ii.To evaluate the moderating influence of internal governance practices on the effect of working capital management practices on financial distress of public Universities in Kenya.

Research Hypothesis

H_{o1} : Working capital management practices have no significant effect on financial distress in public Universities in Kenya.

H_{o2} : Internal governance practices have no significant moderating influence on the effect of working capital management practices on financial distress in public Universities in Kenya.

II. LITERATURE REVIEW

Theoretical Review

Walker's Three Propositions

Walker (1964) established the concept of working capital management by conducting partial experimental tests on three propositions based on the risk-return trade-off associated with working capital management. Walker analyzed the influence of fluctuations in working capital on return rates across nine industries in 1961 and identified a negative link. He articulated three propositions derived from his observations.

Walker initially asserted that changes in the ratio of working capital to fixed capital influence the firm's risk level and the potential for profit or loss. He asserted that a firm aiming to limit risk should employ equity to

finance working capital. By choosing this approach, the firm limits its potential for high returns on equity due to the lack of leverage. The challenge of this idea was the degree of borrowed capital the firm should undertake, which is shaped by management's viewpoint on risk and return. In reaction to this challenge, Walker devised the second proposition.

The second assumption posits that the categories of capital, specifically debt and equity, employed for financing working capital directly affect the organization's risk exposure and the potential for profit or loss. He posited that the debt-equity ratio and the duration of debt maturity affect the risk-return trade-off. Prolonged debt maturities resulted in diminished risk, as management would have adequate time to develop resources to meet debt obligations. Nonetheless, long-term debt generates considerable costs, prompting him to develop the third argument.

The third walker's proposition said that a greater disparity between the maturities of a firm's debt instruments and its internally generated cash flow correlates with increased risk, and conversely. Walker examined only the original proposition; the following two were extrapolated from the facts and findings of the primary assertion (Krishna-Rao & Seshagiri-Rao, 2014).

This theory was relevant to the investigation since it links the variable of working capital management to the research. Efficient management of working capital, a vital financial function, is necessary. This study analyzes cash management, refund and maturity management, and current debt management. This theory asserts that the type of debt or equity employed for financing working capital directly affects the institution's risk profile and the potential for profit or loss.

Conceptual Framework

Independent Variable

Financial Management Practices

Working capital management Practices

- Cash planning and controls
- Creditor monitoring and controls
- Debtor monitoring and controls
- Inventory planning and controls

Dependent Variable

Financial Distress

Financial Distress

$$\text{Debt to asset ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

Moderating Variable

Internal governance

- Accountability
- Transparency
- Management Efficiency

Figure 1: Conceptual Framework

Source: Researchers Conceptualization

Empirical Literature Review

Onchangwa (2019) conducted research to ascertain how working capital affected the financial distress of non-financial companies that were publicly traded. The design of the study was quantitative. These non-financial companies listed on the NSE were the study's target demographic. The study included all of the firms in the analysis using a census sample technique. The secondary data included in the study came from the companies' audited financial records. We used both descriptive and inferential statistics to examine the collected data. The results of the study indicated that, in non-financial listed businesses, working capital management has a positive and significant relationship with financial hardship.

Olang (2021) investigated the relationship between financial stress and working capital management in private businesses in Rwanda's animal feed and wheat milling industries. A descriptive correlational research design was used in the study. From 2011 to 2015, 100 companies listed on the Nigerian Stock Exchange provided secondary data for the study. Data extraction was used to determine the fixed assets, long- and short-term finance, and debt and equity ratios of the businesses that were being studied. The panel data was assessed using a random effects model. The results show that working capital management has a major impact on financial difficulty in private businesses in Rwanda's animal feed and wheat milling sectors.

Mwariri (2020) looked on the relationship between financial difficulties and working capital management practices in companies that are listed on the Nairobi Securities Exchange (NSE). All 67 of Kenya's publicly traded companies will be included in the inquiry. To select 25 businesses from the manufacturing and related sectors, purposeful sampling was used. Both descriptive and inferential statistics were used to analyze the collected data. Descriptive statistics included mean, minimum, maximum, standard deviation, skewness, and kurtosis. Regression analysis and Pearson correlation are two examples of inferential statistics. Stata 14 was used to analyze the data. The results of the study showed a negative relationship between the financial distress of companies listed on the NSE and working capital management strategies.

Olambo and Aluoch (2022) looked into how working capital management affected the bottom line of oil and energy companies that were listed on the Nairobi Securities Exchange. They used the descriptive research methodology. Targets included 367 people working in the oil and energy sectors. To select 191 employees to participate in the study, stratified sampling was used. The study's time frame was 2016–2020. Structured questionnaires were the main source of data. As supplemental data, financial performance in terms of return on equity was collected using data abstraction technologies. The results of the study showed that the financial performance of energy and oil businesses listed on the NSE was positively impacted by working capital management.

Ogbuji and Ogunyomi (2017) looked into the relationship between the financial performance of Nigeria's food and beverage industry and working capital management practices. The sample period, which included secondary data, included the years 2008 through 2017. Nestle Nigeria Plc's annual reports and the CBN statistical bulletin served as the sources of the financial information. The study methodology used is an ex post facto design. In order to achieve the goal of the study, the accounting ratios used profitability and liquidity ratios, while the descriptive statistics included frequencies, mean percentages, and charts. To further objectively assess the suggested hypotheses, a single linear correlation statistical test was used. The findings demonstrated that the working capital management approach of the organization has a significant impact on its financial success.

Research Gaps

Most of the studies done concerning working capital management and financial distress are done on non-financial enterprises with such studies as Onchangwa (2019) which investigated the working capital management and financial distress of publicly listed non-financial enterprises in Kenya; Olang (2021) who studied the working capital management and financial distress of private enterprises in the Rwandan wheat milling and animal feed industries. Although, these studies have shown that there is a relationship between working capital management and financial distress, there is little literature that focuses on public universities in Kenya, an area that is currently experiencing severe financial problems. Mwariri (2020) and Olambo and Aluoch (2022) have conducted similar studies on firms listed in the Nairobi Securities Exchange but the results cannot be generalized to the current study because the financial and management structures of a public university are quite different. Moreover, although Ogbuji and Ogunyomi (2017) discussed the food and beverage industry in Nigeria, the aspect of corporate financial performance is not enough to capture the unique financial structures of education organizations. This is an area that has been left unexplored in earlier research regarding the link between working capital management and financial distress in public universities.

III. RESEARCH METHODOLOGY

Research Philosophy

The current study employed the pragmatism research philosophy. In focus, pragmatism as a research philosophy holds the view that knowledge is the result of its consequences and use in practice. While positivism oriented to the observation and measurement of real phenomena, pragmatism focuses on actions, stating that theories and concepts should be defined by their effectiveness in addressing certain issues. In fact, the pragmatists believe that reality is a work in progress that exists in the context of human activity; the task of the researcher is to work out what works and therefore the research is not searching for the ultimate and permanent laws of the nature and the society (Collins & Hussey, 2014).

This study was therefore best suited for pragmatism since it sought to determine the most effective solution to the problem of financial stress. This philosophy embraced a positivism approach, whereby the

researcher aimed at developing practical information that could assist in the enhancement of the financial management practices while being sensitive to the dynamic environment.

Research Design

In this study, both quantitative and qualitative approaches were used to provide a better understanding of the research issue. Mixed methods research is used as it combines the strengths of both quantitative and qualitative research while also minimizing the limitations of each; In this study, the researcher aims to limit the interferences that can occur when using the two approaches and, if possible, arrive at valid conclusions (Sileyew, 2019).

Target Population

The study targeted 140 respondents comprising of 35 Deputy Vice chancellors (Finance and Administration), 35 finance officers, 35 auditors, 35 Officers in charge of the ICT departments in thirty-five public chartered Universities in Kenya.

Census sampling

Given that there was 35 public universities in Kenya at the time of research, the number of subjects is fairly reasonable to consider them as manageable and therefore the study deemed the census as suitable. Thus, by Census, the researcher employed all the 35 Public Universities in Kenya for data collection.

Data Collection Instruments

Main data was collected through a questionnaire that was developed and administered to the respondents. Closed-ended questions were used because they are easy for the responders, simple to administer, score and analyze. They are appropriate as they protect the respondents, and they can respond with full understanding without bias. This was done for easy analysis of the questions by using the Likert scale. Secondary data was collected through a data collection sheet.

Data Collection Procedures

The researcher first recruited research assistants that assisted in data collection. The questionnaires were administrated by the assistants and secondary data was obtained. The respondents were asked to fill up the questionnaires and an interval of one month was provided after which the assistant gathered the completed ones.

Pilot Test

It is widely prescribed that, the pilot study could be conducted among the 10% of the desired sample size (Cooper & Schindler, 2011). This meant that the pilot study was to be conducted on 3.5 of the total targeted population of the population of 35 universities, which were the constituent university colleges to be selected randomly; these were Turkana University College, Bomet University College, and Koitaleel Samoei University College. The constituent university colleges in Kenya were chosen because their characteristics are close to those of the fully chartered public universities.

Reliability

Reliability is the capacity of a research instrument to give consistent results every time it is used and is a true reflection of the population under study. On this basis, the degree to which the data collected in the course of the study provides reliable results can be referred to as dependability. Cronbach's alpha coefficient ranging from 0 to 1 was used to measure the reliability of the results. According to Kothari and Gaurav (2014), values of reliability ranging from 0.7 and 1.00 are considered high and acceptable while values below 0.7 considered low and hence, not suitable.

Table 1: Cronbach's Alpha Reliability

Construct	Number of Items	Cronbach alpha	Conclusion
Working capital management	10	0.873	Reliable
Internal governance practices	10	0.804	Reliable
Financial distress	10	0.813	Reliable

(Source: Research Data, 2024)

As mentioned in table 1, the reliability analysis of the study revealed that the working capital management, internal governance practices and financial distress had Cronbach alpha value of 0.873, 0.804 and 0.813 respectively. Cronbach's alpha values were all above 0.7; therefore, all the constructs of financial management practices were considered to be reliable.

3.8.2 Validity

Validity establishes the degree to which a test measure is valid in terms of its intended purpose; Kothari & Gaurav, 2014 Expert analysis was conducted to determine if the questionnaires effectively captured the intended outcomes. Some of the participants that were given the questionnaires included esteem officials such as supervisors. To ensure that the questionnaires contain the necessary information, it was important to go through the questionnaires. To test the validity of the research, the study also applied the KMO and Bartlett test. The KMO

value shows the appropriateness of the sample size for conducting factor analysis. It refers to the extent to which actual variation in data could be accounted for by some other factors. KMO test value ranges 0 – 1, where values above 0.90 are interpreted as Excellent, 0.80 – 0.89 as Good, 0.70 – 0.79 as Adequate, 0.60 – 0.69 as Mediocre and below 0.60 meant that the variable is unsuitable for factor analysis. The Bartlett test examines the possibility that the correlation matrix is an identity matrix, which would mean that factor analysis is not suitable. It is a value below 0.05, meaning that the correlations among the variables are large enough for factor analysis.

Table 2: KMO and Bartlett's Tests

	Items retained	KMO	Bartlett's test		
			χ^2	df	p-value
Working capital management	10	0.919	733.266	45	0.005
Internal governance practices	9	0.762	511.616	45	0.000
Financial distress	7	0.766	632.671	45	0.001

(Source: Research Data, 2024)

The validity of the factor analysis models used are shown in Table 2 below. KMO statistic for working capital management, internal governance practices and financial distress were 0.919, 0.762 and 0.766 respectively. All the KMO statistics are mainly good, one is excellent and the other two are adequate. This suggests that your dataset is suitable for factor analysis. To evaluate the adequacy of the sample, Bartlett's test was used; the importance of the chi-square statistic was compared. From Table 3.4, all of the p-values of Bartlett's test of sphericity are less than 0.05, which suggests that the datasets can be subjected to factor analysis.

Data Processing and Analysis

Data analysis can be defined as the process of going through the information collected in a study and making conclusions and inferences from the obtained data (Kamilaris, Kartakoullis, & Prenafeta, 2017). Before the actual analysis was done on the data collected, the data was cleaned, arranged and coded before it was analyzed using a statistical tool for social science. The dependent variable that concerned the financial distress was established by ratio-based questions and the asset-to-debt ratio.

Statistics used for the study included both descriptive and inferential statistics. The quantitative data analysis involved means, standard deviations, and percentages of the data collected. The two inferential statistical tools discussed here are multiple linear regression and correlation analysis. By using multiple linear regression analyses, the relationship between WCM practices and financial distress was assessed. Internal governance was established to have a moderating effect on the multiple linear regression model as shown in the following equations.

$$y = \beta_0 + \beta_1 WCM + \varepsilon_1 \dots \dots \dots (3.4)$$

$$y = \alpha_0 + \alpha_1 WCM IG + \varepsilon_2 \dots \dots \dots (3.5)$$

Where:

y = Dependent Variable

β_0 = Constant of the regression model without the Moderator variable

β_1 = Coefficients of the regression model without the moderator variable

α_0 = Constant of the regression model with the Moderator variable

α_1 = Coefficients of the regression model with the moderator variable

WCM = Working capital management Practices

IG = Internal Governance

ε_1 = Error term of the model without the moderating variable

ε_2 = Error term of the model with the moderating variable

IV. RESEARCH FINDINGS AND DISCUSSION

Response rate

The study involved 140 participants from 35 public universities in Kenya. A total of 31 public universities participated in the study and the number of respondents was 114. This represented 81.4% response rate. The above response rate is considered satisfactory for this study on the grounds that it is not feasible to achieve an even higher response rate in a survey of this nature. This is in accordance with Sileyew, (2019) who noted that for social science study any response rate above 60% is sufficient and also stated that most surveys done with questionnaires were considered to have excellent response rates for anything above 60% Edward and Roberts (2002) further observed that anything below 60% was considered undesirable while anything above 60% was considered satisfactory.

Table 3: Response rate

Targeted respondents	returned questionnaires	Response Rate
140	114	81.4%

(Source: Research Data, 2024)

Descriptive statistics

Capital budgeting practices and financial distress

Respondents were asked various questions that helped in establishing the effect of working capital management practices on financial distress in public Universities in Kenya. The responses were shown in **Table 4: Capital Budgeting Practices and financial distress**

No	Statement	YES	NO			
1.	Cash control and planning mechanisms are known to all the members of the university	48 (42.1)	66 (57.9%)			
2	The University has a creditor control and monitoring system	71 (62.3%)	43 (37.7%)			
3	The University has an effective inventory planning system that helps in reducing financial distress	49 (43.0)	65 (57.0)			
		1-SD	2-D	3-N	4-A	5- SA
4.	The University has well laid out cash management policies	34 (29.8%)	35 (30.7%)	10 (8.8%)	20 (17.5%)	15 (13.2%)
5.	There are strict controls that manage cash inflow and outflow in the institution	32 (28.1%)	43 (37.7%)	8 (7.0%)	19 (16.7%)	12 (10.5%)
6.	Strict adherence to these control measures of cash management are considered to be effective in management of financial distress in the institution	17 (14.9%)	19 (16.7%)	10 (8.8%)	36 (31.6%)	32 (28.1%)
7.	There are efficient and effective ways of managing debtors in the university	27 (23.7%)	39 (34.2%)	9 (7.9%)	27 (23.7%)	12 (10.5%)
8.	The levels of debtors in the university are currently at manageable levels	28 (24.6%)	38 (33.3%)	16 (14.0%)	17 (14.9%)	15 (13.2%)
9.	Current debt management minimizes financial distress of the university	17 (14.9%)	22 (19.3%)	8 (7.0%)	38 (33.3%)	29 (25.4%)
10.	The University regularly reviews and updates its inventory management policies to adapt to changing financial conditions	31 (27.1%)	32 (28.1%)	11 (9.6%)	19 (16.7%)	21 (18.4%)

The findings in Table 4 shows that 57.9% of the respondents stated that cash control and planning mechanisms are not known to all the members of the university while 42.1% of the respondents stated that cash control and planning mechanisms are known to all the members of the university. The data in Table 4.19 reveals that 62.3% of respondents agree that the university has a creditor control and monitoring system in place, while 37.7% believe it does not. The responses in Table 4 shows that 57.0% of the respondents stated that the university had no effective inventory planning system that helps in reducing financial distress while 43.0% of the respondents stated that the university has an effective inventory planning system that helps in reducing financial distress. The research sought to establish whether the university has well laid out cash management policies. From the findings in Table 4, 29.8% strongly disagreed, 30.7% disagreed, 8.8% were neutral, 17.5% agreed and 13.2% strongly agreed that the university has well laid out cash management policies. Respondents were asked on whether cash control and planning mechanisms are known to all the members of the university. The data in Table 4 shows that 65.8% of respondents either strongly disagreed (28.1%) or disagreed (37.7%) that there are strict controls managing cash inflow and outflow in the institution, while only 27.2% (16.7% agreed, 10.5% strongly agreed) believed otherwise. The remaining 7.0% remained neutral. Respondents were asked on whether strict adherence to these control measures of cash management are considered to be effective in management of financial distress in the institution. Table 4 shows that 14.9% strongly disagreed, 16.7% disagreed, 8.8% were neutral, 31.6% agreed and 28.1% strongly agreed that strict adherence to these control measures of cash management is considered to be effective in management of financial distress in the institution. The data in Table 4.16 shows that 57.9% of respondents either strongly disagreed (23.7%) or disagreed (34.2%) that there are efficient and effective ways of managing debtors in the university. Meanwhile, 34.2% (23.7% agree, 10.5% strongly agree) believed otherwise, and 7.9% remained neutral. The data in Table 4 shows that a majority of respondents (57.9%) either strongly disagree (24.6%) or disagree (33.3%) that the levels of debtors in the university are currently at manageable levels. Only 28.1% (14.9% agree, 13.2% strongly agree) believe that debtor levels are manageable, while 14% remain neutral. The data in Table 4.18 shows that 58.7% of respondents either agree (33.3%) or strongly agree (25.4%) that current debt management minimizes financial distress in the university. In contrast, 34.2% (19.3% disagreed, 14.9% strongly disagreed) believe that it does not, while 7.0% remained neutral. Respondents were also asked to clarify whether the university has an effective inventory planning system that helps in reducing financial distress. The researcher sought to evaluate on whether The University regularly reviews and updates its inventory management policies to adapt to changing financial conditions. The findings in Table 4 shows that 27.2% strongly disagreed, 28.1% disagreed, 9.6% were neutral, 16.7% agreed and 18.4% strongly agreed that the University regularly reviews and updates its inventory management policies to adapt to changing financial conditions.

Internal governance practices

Respondents were asked various questions that helped to assess the moderating effect of internal governance on the effect of capital budgeting practices on the financial distress of public Universities in Kenya. The results were shown on Table 5.

Table 5: Internal Governance practices

No.	Statement	1-SD	2-D	3-N	4-A	5- SA
1.	The University has internal governance systems	12 (10.5%)	16 (14.0%)	3 (2.6%)	53 (46.5%)	30 (26.3%)
2.	Staff are always accountable for the decisions and judgment they make	14 (12.3%)	19 (16.7%)	7 (6.1%)	35 (30.7%)	39 (34.2%)
3.	High level of accountability helps the institution to curb mismanagement of resources	17 (14.9%)	19 (16.7%)	11 (9.6%)	41 (36.0%)	26 (22.8%)
4.	There is a high level of transparency during preparation of financial statements	37 (32.5%)	35 (30.7%)	10 (8.8%)	19 (16.7%)	13 (11.4%)
5.	Transparency helps to reduce financial distress	13 (11.4%)	15 (13.2%)	4 (3.5%)	45 (39.5%)	37 (32.5%)
6.	Corruption cases in the University are minimal	35 (30.7%)	36 (31.6%)	9 (7.9%)	16 (14.0%)	17 (15.8%)
7.	The University has adequate internal financial controls that to help manage the level of financial distress	16 (14%)	20 (17.5%)	5 (4.4%)	39 (34.2%)	34 (29.8%)
8.	All the transactions are accompanied by supportive documents to reduce the incidences of corruption	19 (23.7%)	24 (34.2%)	5 (4.4%)	39 (21.1%)	27 (16.7%)
9.	There is high management efficiency in the University when implementing the university policies	32 (28.1%)	40 (35.1%)	7 (6.1%)	16 (14.0%)	19 (16.7%)

From the above observations, the study aimed at determining whether the University has internal governance systems. The results reveal that 10.5% strongly disagreed and 14.0% disagreed, 2.6 % of the participants were neutral while 46.5% agreed and 26.3% strongly agreed that the University has internal governance systems. The researcher was interested in determining whether the staff is always responsible for the decision and judgement they make. Specifically, 12.3% of the respondents strongly disagreed, 16.7% disagreed, 6.1% were neutral, 30.7% agreed and 34.2% strongly agreed that staff are always held responsible for the decisions and judgment they make. The studied had to determine if a high level of accountability assists an institution to prevent mismanagement of resources. The responses indicated that 14.9% strongly disagreed, 16.7% disagreed, 9.6 % were neutral, 36.0% agreed and 22.8% strongly agreed that high level of accountability assists the institution to address the mismanagement of resources, as depicted in the Table 5 below. The researcher sought to find out whether there is high level of transparency when preparing the financial statements. The results in Table 5 reveals that 32.5% of the respondents strongly disagreed, 30.7% disagreed, 8.8% had a neutral stand, 16.7% agreed and 11.4% strongly agreed on the statement high level of transparency during preparation of financial statements. The study therefore sought to establish the extent to which transparency reduces suffering in the area of finance. Regarding the statement stating that high transparency reduces financial suffering, 11.4% of the participants strongly disagreed, 13.2% disagreed, 3.5% were in the neutral category, 39.5% agreed, while 32.5% strongly agreed. Participants were asked questions on the level of corruption incidences within the University. Table 5 also shows that 30.7% of the samples strongly disagreed, 31.6% disagreed, 7.9% were neutral, 14.0% agreed, and 15.8% strongly agreed with the statement “instances of corruption at the University are low”. The objective of this research was to find out whether the institution had adequate internal control measures to address the issue of financial difficulty. From the results presented in Table 5, 14.0% strongly disagreed, 17.5% disagreed, 4.4% were neutral, 34.2% agreed, and 29.8% strongly agreed that the organization had adequate internal financial controls to prevent financial troubles. This study aimed at determined whether all the transactions are backed by supporting documents in order to minimize the level of corruption. According to the findings presented in the table 5, 23.7% strongly disagreed, 34.2% disagreed, 4.4% were neutral, 21.1% agreed, and 16.7% highly agreed that all transactions are supported by supporting paperwork to reduce cases of corruption. The respondents were asked about the extent to which managerial efficiency is observed at the University in the implementation of the university policy. From the results presented in Table 5, 28.1% strongly disagreed, 35.1% disagreed, 6.1% were neutral, 14.0% agreed, and 16.7% highly agreed on the high management efficiency in the University throughout the implementation of university policies.

Financial distress

Respondents were asked to rate various statements that helped in establishing the financial distress of public Universities in Kenya. The responses were shown in Table 6.

Table 6: Financial Distress

		1-SD	2-D	3-N	4-A	5- SA
1.	The university budget run out ratio is high	12 (10.5%)	19 (16.7%)	9 (7.9%)	47 (41.2%)	27 (23.7%)
2.	The salary to total revenue ratio is high	10 (8.8%)	11 (9.6%)	9 (7.9%)	50 (43.9%)	34 (29.8%)
3.	The net debt to total operating revenue ratio is high	13 (11.4%)	19 (16.7%)	8 (7.0%)	49 (43.0%)	25 (21.9%)
4.	The suppliers are paid in full and on time	30 (26.3%)	39 (34.2%)	9 (7.9%)	17 (14.9%)	19 (17.6%)
5.	The University will often vire finances from other accounts to cover for deficits in other departments that have shortfalls	13 (11.4%)	19 (16.7%)	8 (7.0%)	49 (43.0%)	25 (21.9%)
6.	The Auditor general's office has queried expenditures during the audit process	13 (11.4%)	15 (13.2%)	4 (3.5%)	45 (39.5%)	37 (32.5%)
7.	The University clears all its part time obligations before the end of the financial year, as well as all the pending creditors	34 (29.8%)	50 (43.9%)	9 (7.9%)	11 (9.6%)	10 (8.8%)

From the above findings, the respondents were asked whether the university budget run out ratio is high meaning that at times it uses more than what it has budgeted for. Table 6 below indicates that 10.5% strongly disagreed, 16.7% disagreed, 7.9 % were neutral, 41.2 % agreed, 23.7 % strongly agreed that the university budget run out ratio is high. To sample respondents asked information whether the extent of the salary to total operating income ratio is high meaning that the compensation expense is above 70% of the operating revenue. According to the findings presented in table 4.52, 8.8% strongly agreed, 9.6% disagreed, 7.9% were neutral, 43.9% agreed, and 29.8% strongly agreed that the pay to total operating revenue ratio is high. Therefore, the purpose of this study was to establish the extent to which high net debt to total operating revenue ratio represents a high level of indebtedness of the university. 11.4% of the respondents strongly disagreed, 16.7% disagreed, 7.0% were neutral, 43.0% agreed and 21.9% strongly agreed with the statement that the net debt to total operating revenue ratio is high, meaning that the university is indebted. The researcher required to determine whether the University has a debt repayment policy and if the suppliers are being paid in full and on time. According to the survey results in table 6, 26.3% strongly disagreed, 34.2% disagreed, 7.9% were neutral, 14.9% agreed and 16.7% strongly agreed that the institution had a debt repayment policy and the suppliers are paid in full and on time. The respondents were asked on whether, the university will often transfer funds from other accounts to other departments which have deficits. With regards to the statement “The university will often wire finances from other accounts to cover for deficits in other departments that have shortfalls”, 11.4% strongly disagreed, 16.7% disagreed, 7.0% were neutral, 43.0% agreed and 21.9% strongly agreed. This study sought to establish if the Auditor General’s office has raised an issue with the expenditures during the audit process in a manner that suggests budget constrains on those expenditures. In response to the statement that the Auditor General’s office had scrutinised expenses during the audit process, 11.4% strongly disagreed, 13.2% disagreed, 3.5% were neutral, 39.5% agreed and 32.5% strongly agreed. The respondents were asked whether the university complies with all the part-time responsibilities and pays off all the creditors before the end of every financial year. Concerning the statement that the university meets all its part-time responsibilities and clears all creditors before the end of the financial year, 29.8% strongly disagreed, 43.9% disagreed, 7.9% were neutral, 9.6% agreed and 8.8% strongly agreed.

Correlations analysis

In this study, the statistical technique of choice for establishing the direction, strength and nature of the relationship between the independent variable of WCM practices, the moderating variable of internal governance practices, and the dependent variable of financial distress is the Pearson product moment correlation.

Therefore, a two-tailed test was used for this analysis at 5 percent significance level. We check the hypothesis stating that the correlation coefficient is equal to zero, or in other words, there is no real correlation between the variables. The rejection criteria for this test was that if the p-value corresponding to the correlation coefficient is below 0.05, the null hypothesis that indicates no correlation is rejected. Therefore, one can state that there is a high probability of a strong positive relationship between the variables. On the other hand, if the p-value is equal to or greater than 0.05 then the null hypothesis cannot be rejected thus meaning that there is no significant relationship between the variables. The results were presented in Table 7, which highlighted that all the independent variables used in the study influenced the dependent variable in some way.

Table 7: Correlational analysis Based on Binary Regression

	WCM	IGP	Y
WCM	1		
IG	0.301 (0.213)	1	
Y	-0.764* (0.001)	-0.731* (0.000)	1

Financial distress and working capital management have a very strong negative link, as seen by the correlation coefficient of -0.764. This implies that improved working capital management will probably result in a considerable decrease in the degree of financial strain experienced by Kenyan public colleges. The correlation's strength is further supported by the probability value, which is likewise highly significant at $0.001 < 0.05$. Maintaining liquidity and financial stability through efficient management of short-term assets and liabilities lowers the risk of financial distress.

Financial distress and internal governance practices have a high negative link, as indicated by the correlation coefficient of -0.731. This implies that financial strain in Kenyan public colleges tends to decline as internal governance processes get better. The robustness of this link is highlighted by the very significant probability value ($0.000 < 0.05$) associated with this correlation. In order to mitigate financial risks and lessen financial suffering, strong corporate governance systems guarantee responsibility, transparency, and efficient oversight.

Normality Test

To test for normality of distribution of working capital practices on financial distress, Histogram and Shapiro Wilk test were used. For evaluation of whether the data was normally distributed or not, a histogram was created; a normal distribution is a bell-shaped curve. However, if the histogram resembles a bell shaped curve, then there is an indication that the data in question is normally distributed. This is only true if the histogram of the data is relatively normal, meaning it is bell-shaped, symmetrical and unimodal (Keya & Rahmatullah, 2016). The results were shown in figure 2.

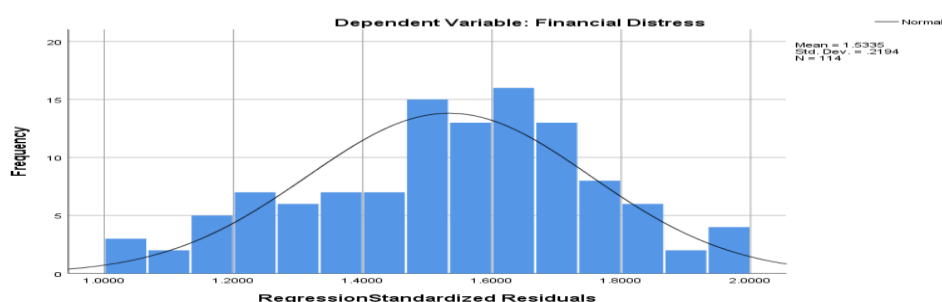


Figure 2: Histogram on distribution of Residuals (Source: Research Data, 2024)

As highlighted in the figure 4.3, the histogram generated produced a bell shaped curve, this was an indication that the model residues where normally distributed.

Shapiro-Wilk test was employed to supplement the model histogram data and check for normality of the model variables. The results are summarized in the following table.

Table 8: Shapiro Wilk Normality Test

	Statistic	Shapiro-Wilk df	Sig.
Working Capital Management practices	.982	114	.126
Internal governance	.986	114	.270
Financial distress	.980	114	.093

(Source: Research Data, 2024)

Table 8 shows that working capital management procedures, internal governance, and financial distress were significant at 0.000, 0.000, and 0.000 respectively by Shapiro-Wilk test. Since the p-values of all the variables are above 5%, the study failed to reject the null hypothesis and concluded that the residuals in the model

were normally distributed. In this histogram average of 1.5335 is also calculated which is greater than the standard deviation of 0.2194 which shows the variables are normally distributed.

Test of Autocorrelation

In this case, the autocorrelation is tested using the Durbin-Watson statistic. This statistic measures the level of autocorrelation of residuals in a regression analysis which is a phenomenon that occurs when errors in a time series model are related to one another. The Durbin-Watson statistic ranges from 0 to 4 and where it hits the center value of 2 then it means there is no autocorrelation. Values close to 0 mean positive autocorrelation, meaning that the residuals are always either increasing or decreasing over time, while values close to 4 mean negative autocorrelation whereby the residuals oscillate in terms of signs. The results were presented in Table 9.

Table 9: Test of Autocorrelation

Durbin-Watson Statistic
1.923

(Source: Research Data, 2024)

In the study on financial distress in Kenyan Public Universities, the Durbin-Watson statistic value is $1.923 \approx 2$ which implies that there is no serial correlation in the residuals of the model. As a consequence, the null hypothesis stating the absence of autocorrelation cannot be rejected. This implies that the working capital management does not have a strong negative relationship with financial distress in the Kenyan Public Universities as supported by the data used in the study.

Test of heteroscedasticity

This was done using a scatter plot. A scatter plot is a type of graphical representation of data points which are plotted on the co-ordinate plane so that each point represents the two different variables. In cases of heteroscedasticity, when analyzing a scatter plot to check the model assumption, we look for a funnel-shaped pattern where the variability of the residuals increases or decreases with the increase or decrease of the values of one or more independent variables. If such a pattern is observed, it may be an indication that heteroscedasticity might be present in the model. In the case of the null hypothesis, the goal is usually to check if the variance of the residuals is constant (homoscedasticity) or not (heteroscedasticity). If the null hypothesis of homoscedasticity is rejected by statistical tests or by looking at the scatter plot, this would mean heteroscedasticity. On the other hand, failure to reject the null hypothesis means that there is no sufficient evidence to conclude that the variance differs from constant variance hence supporting the homoscedasticity assumption. The results are shown in Figure 3 below.

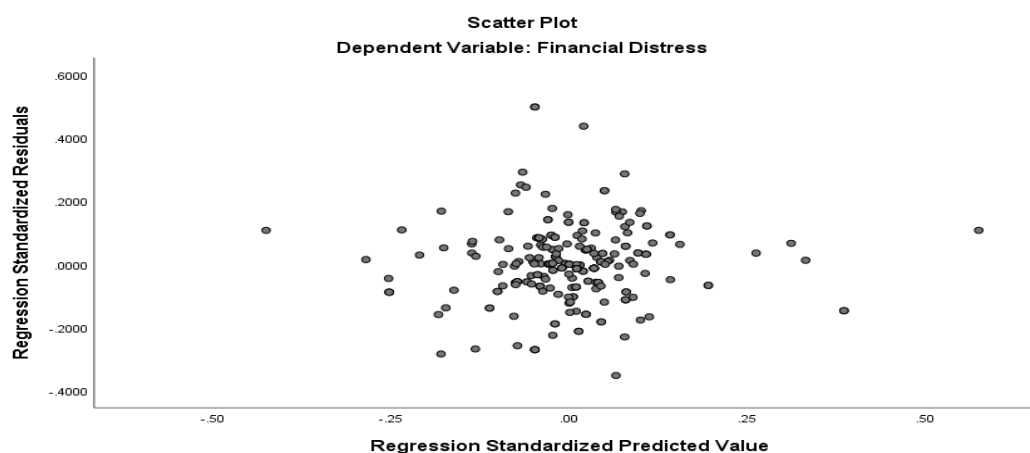


Figure 3: Scatter Plot on Financial Accountability (Source: Research Data, 2024)

There is no clear tendency of the residuals increasing, as seen in the scatter plot data in Figure 4.4, or decreasing as the expected values change. However, homoscedasticity is suggested by the fact that the plots are scattered equally in a circular pattern around the zero line.

Test of multicollinearity

To determine the level of multicollinearity, the Variance Inflation Factor (VIF) test was used. VIF measures the degree of inflation in variance of the estimated regression coefficients due to multicollinearity. In general, when VIF exceeds 10, it is perceived as indicating multicollinearity.

Table 10: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1			
	Working Capital Budgeting Practices	.995	1.005
2			
	Capital Budgeting Practices	.984	1.016
	Internal Governance Practices	.960	1.042

(Source: Research Data, 2024)

In this research, the VIF values of the predictor variables are revealed to be less than 1. In model 1, the variable working capital management practices had a VIF of 1.005. For the second model the VIF values of working capital management practices and internal governance practices were 1.016 and 1.042 respectively. These values indicate that multicollinearity is not a problem in this analysis as all the VIF values are less than 10. Thus, the null hypothesis of no multicollinearity is not rejected according to the VIF results and the predictor variables are not highly correlated and can be included in the regression analysis.

Model Summary

This gives a clear understanding on the relationship between capital budgeting practices and financial distress of Kenyan public universities with internal governance standards as a moderating factor. R is the measure of multiple correlation coefficient that captures the strength of the linear relationship between the forecasted values of a model and the actual observed values. R² is the coefficient of determination, which reveals the relationship of variance in the model between the dependent and independent variable.

Table 11: Model summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Change Statistics				
					Change	F Change	df1	df2	Sig. F Change
1	.738 ^a	.545	.416	.2353034	.545	4.471	4	26	.007
2	.771 ^b	.594	.441	.2328530	.049	1.968	1	25	.003

(Source: Research Data, 2024)

When the moderating variable has not been taken into consideration, the value of R in model 1 is 0.738 which indicates that there is a strong relationship between the independent and dependent variables. The value of R square of 0.545 shows that working capital management practices explain 54.5 % of the variation in financial distress while the remaining 45.5% in the change in financial distress is due to other factors outside the model and hence, is a good fit for the model.

The adjusted R square value of 0.416 adjusts for the number of predictors in the model, indicating that 41.6% of the variability in financial distress is accurately explained by the predictors after considering the model's complexity. The relatively low standard error of the estimate (0.2353034) suggests that the model's predictions are precise, while the significant F change value (0.007) indicates that the overall model is statistically significant, meaning that the predictors collectively contribute to explaining financial distress in Kenyan Public Universities.

In the case of Model 2 where internal governance practices is a moderating variable, it can be seen from the model summary that there are slight enhancements in certain areas as compared to Model 1. We have the R squared of 0.771 in Model 2 showing that the relationship between the independent and dependent variables is stronger than in the case of Model 1. The value of R square has increased to 0.594 in this model which means that about 59.4% of the variation in financial distress is explained by the predictor variables in this model which is a significant improvement over Model 1. The adjusted R square value of 0.441 takes into consideration the extra variability added by the moderating variable, meaning that 44.1% of the variability in financial distress is explained by the predictors as captured in Model 2. However, the value of the standard error of the estimate has reduced to 0.2328530, which shows that the model can predict more accurately. The F change value of 1.968 is significant at 0.003 thus the addition of the moderating variable enhances the explanation of financial distress in Kenyan Public Universities though to a lesser degree as observed in Model 1.

Thus, based on the comparison between Model 1 and Model 2, it may be inferred that the addition of internal governance practices as a moderating variable improves the model, though slightly. An improvement of R square from 0.545 to 0.594 is an indication that the moderating variable plays a significant role in explaining financial distress not only by the practice of working capital management. However, it is crucial to understand that the increase in the model fit, based on the changes in R square and the adjusted R square values are relatively small to the improvement accrued from WCM practices only. However, the F change value that is statistically significant in Model 2 indicates that the decision to include internal governance practices as a moderating variable is appropriate and brings value to the model and its capacity to explain financial distress in Kenyan Public Universities.

ANOVA

It is a statistical method used to compare the mean values of three or more groups in order to know whether there are significant differences between the groups. In the context of regression analysis, ANOVA tests the goodness of the regression model by comparing the amount of variation covered by the model, which is referred to as explained variation, and the variation that is left out, referred to as residual variation. The F statistic obtained from the ANOVA is the comparison of the between-group variability (accounted for by the model) to the within-group variability (residual). A high F value compared with the critical value means that the regression model fits the data better than could be expected by chance and thus it can be concluded that the set of independent variables has the influence on the dependent variable.

Table 12: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.221	4	.555	20.904	.000 ^b
	Residual	2.895	109	.027		
	Total	5.116	113			
2	Regression	2.275	5	.455	17.298	.000 ^c
	Residual	2.841	108	.026		
	Total	5.116	113			

(Source: Research Data, 2024)

The results of model one without moderating variable show a significance value of .000, F value 20.904 meaning that the model is statistically significant. This implies that the management of working capital affects the financial distress of Kenyan Public Universities. The calculated F value of 20.904 is greater than the tabulated F value of 2.69 at five percent level of significance which indicates the significance of the model. In model two which has the moderating variable, the F value of 17.298 and the significance value of 0.000 also shows that the regression model is significant. This therefore implies that introducing the moderating variable of internal governance practices increases the extent to which the model is able to explain the relationship between working capital management practices and financial distress. The F value of 17.298 is greater than the critical value of 2.53, which supports the importance of the model with the moderating variable. These findings imply that both the models hold a significant fit in explaining the research data with model two which includes the moderating variable showing an even more robust correlation between WCM practices and financial distress in Kenyan Public Universities.

Regression coefficients

The study used multiple linear regression analysis to determine the impact of WCM practices on the financial distress of KPU. The regression coefficients were computed to assess the strength of internal governance practice as a mediator of the capital budgeting practices on the financial distress of Kenyan Public Universities. The regression results are shown in the following;

Table 13: Regression coefficients

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	.268	.062	4.326	.000
	Working capital management	-.129	.046	-2.783	.008
2	(Constant)	.247	.059	4.169	.000
	Working capital management	-.161	.037	-4.331	.001
	Internal governance practices	-.147	.036	-4.039	.003

(Source: Research Data, 2024)

Table 4.70 regression results produced a regression model (4.1) and (4.2).

$$Y = 0.268 - 0.129 \text{ WCM} \dots\dots\dots (4.1)$$

$$Y = 0.247 - 0.161 \text{ WCM} - 0.147 \text{ IGP} \dots\dots\dots (4.2)$$

Working capital management practices and financial distress

The objective of the study was to establish the effect of working capital management practices on financial distress of public Universities in Kenya. The objective was built on the null hypothesis that working capital management practices had no significant effect on financial distress in public Universities in Kenya.

Table 13 below reveals the regression coefficient of working capital management was -0.129 in model 1. This is followed by a significance value of 0.008 which gives a negative and significant value of working capital management on financial distress. This significance is also supported with $t = -2.783$ which is less than the t critical value of -2.042. Therefore the null hypothesis that the working capital management practices had no significant impact on the financial distress was rejected.

In Model 2, the beta coefficient of working capital management practices is -0.161 with a significance of 0.001 and it had t-statistic of -3.308, which is less than the t critical value of -2.042. This provides a negative and significant relationship between WC management practices and financial distress. Thus, the null hypothesis that WCM practices did not have an impact on financial distress was turned down. Model 2 reduces this relationship to some extent by including internal governance practices, which indicates that good internal governance may reduce the impact of working capital management practices on financial distress through the buffering of financial distress.

The above results were similar to the outcomes from the descriptive statistics where majority of the respondents agreed that working capital management practices had a significant effect on financial distress. For example, majority of the respondents agreed that strict adherence to control measures of cash management are considered to be effective in management of financial distress in the institution. Also, majority of the respondents agreed that debtor and creditor management minimize financial distress of the university.

The results were also similar to the results obtained by Olambo and Aluoch (2022) in their study: "Working Capital Management and Financial Performance of Firms: A Study of Manufacturing Sector," the authors have also found that proper management of accounts receivable and accounts payable positively affected the financial performance and had a positive impact on financial distress. They pointed out that effective cash management and following control measures minimizes the risks.

Internal governance practices moderating the effect of financial management practices and financial distress

The objective of the study was to evaluate the moderating influence of internal governance practices on the effect of selected financial management practices on financial distress of public Universities in Kenya. This was based on the null hypothesis that internal governance practices had no significant moderating influence on the effect of selected financial management practices on financial distress in public Universities in Kenya.

In Model 2, internal governance practices assumes a negative coefficient of -0.147 and is statistically significant at the 0.003 level. The above findings are further supported by t value of -4.039 which is less than the critical t value of -2.042. The addition of this moderating variable enhances the robustness of the model thereby supporting the assertion of increased internal governance as a way of reducing financial distress in Kenyan Public Universities.

These findings confirm the results of the descriptive statistics whereby the outcomes reveal that the implantation of internal governance practices aids in the reduction of financial distress in public universities in Kenya. For instance, the majority of the respondents noted that high level of accountability assist the institution to minimize mismanagement of resources. The respondents were also in agreement with the statement that high transparency reduces financial distress.

The findings are also supported by other authors such as Bitu & Muthoni 2022. In the study titled "The Role of Internal Governance in Financial Management: Evidence from Public Universities in Kenya," the authors established that internal governance practices play a crucial role in reducing financial problems since they promote accountability and transparency. Their findings support the aforementioned studies about the effects of governance on management of resources (Muigai & Muriithi, 2017). In their study titled: 'Accountability Mechanisms and Financial Performance in Public Sector Institutions', they found out that accountability leads to better performance and less financial problems. This supports the conclusion that accountability can assist in preventing abuses in the usage of resources in universities.

V. Conclusion

Working capital management practices

The results from the descriptive statistics shows that majority of the respondents agreed that implementation of working capital management practices helps in reducing financial distress in public universities in Kenya. This can be through Cash control and planning mechanisms, strict adherence to control measures of cash management, current debt management and inventory management. This implies that when working capital management improves, financial distress in public universities reduces. The findings from the inferential statistics shows a regression coefficient for model 1 and 2 (regression coefficient=-0.129 and -0.161, p value=0.008 and 0.001 respectively). This implies that there is a negative and significant relationship working capital management practices and financial distress. It is therefore concluded that working capital management practices had a negative and significant effect on financial distress in public universities in Kenya.

Internal governance practices moderating the effect of financial management practices and financial distress

The results in descriptive statistics shows that majority of the respondents agreed that incorporating internal governance practices as a moderation variable on the effect of financial management practices helps in

reducing financial distress in public universities in Kenya. This reduction in financial distress was through high level of accountability, high level of transparency and high management efficiency in the university. From the inferential statistics (regression coefficient=-0.147, p value= 0.003), there is a negative and significant effect of internal governance practices as a moderating variable on financial distress. Therefore, it is concluded that the moderating effect of internal governance practices had a negative and significant effect on the relationship between financial management practices and financial distress in public universities in Kenya. This implies that an increase in the adoption of internal governance practices helps in reducing the levels of financial distress in Kenyan public universities.

VI. Recommendation

Working capital management practices and financial distress

The study suggested that public universities should develop sound policies on cash management that would enhance proper use of cash.

Public universities were urged to have compulsory training sessions that would make all the members understand cash control and planning.

The study also recommended that there should be better internal control mechanisms that govern cash in and cash out processes in public universities.

Internal governance practices moderating the effect of financial management practices and financial distress

The study recommended that in the process of preparing the financial statements, public universities should focus on increasing transparency.

The study recommended that anti-corruption measures should be put in place and integrity and accountability should be upheld.

It is recommended that the public universities should ensure that all the transactions done are accompanied by proper documentation to reduce risks of corrupt practices.

References

- [1]. Akbar, A., Jiang, & Akbar, M. (2022). Do working capital management practices influence investment and financing patterns of firms? *Journal of Economic and Administrative Sciences*, 91-109.
- [2]. Amponsah, & Asiamah, M. (2021). Working capital management and profitability of listed manufacturing firms in Ghana. *International journal of productivity and performance management*, 1751-1771.
- [3]. Bitu, C., & Muthoni, A. (2022). The role of internal governance in financial management: Evidence from public universities in Kenya. *International Journal of Financial Management*, 123-134.
- [4]. Boisjoly, R. P., Conine, & McDonald. (2020). Working capital management: Financial and valuation impacts. *Journal of Business Research*, 1-8.
- [5]. Collins, & Hussey. (2014). *Business Research and Research Philosophy*. Basingstoke: Palgrave Macmillan.
- [6]. Commissioner for University Education Report. (2019). *Government funding of the Universities*. Nairobi.
- [7]. Cooper, D., & Schindler, P. (2011). *Business Research Methods*. New Delhi-India: McGraw-Hill Publishing.
- [8]. Edward, & Roberts. (2002). Increasing Response Rates of Questionnaires. *British Medical Journal*, 324-1183.
- [9]. Guha, S., & Kumar, S. (2018). Emergence of big data research in operations management, information systems, and healthcare: Past contributions and future roadmap. *Production and Operations Management*. 1724-1735.
- [10]. Habib, A. M., & Kayani, U. N. (2022). Does the efficiency of working capital management affect a firm's financial distress? Evidence from UAE. *Corporate Governance: The international journal of business in society*, 22(7), 1567-1586.
- [11]. Kamilaris, A., Kartakoullis, A., & Prenafeta. (2017). A review on the practice of big data analysis in agriculture. *Computers and Electronics in Agriculture*. 23-37.
- [12]. Kenya Economic Report. (2022). *Building Resilience and Sustainable Economic Development in Kenya*. Nairobi.
- [13]. Keya, R., & Rahmatullah, I. (2016). A brief review of tests of normality. *American Journal of Theoretical and Applied Statistics*, 5(1), 5-12.
- [14]. Kothari, C. R., & Gaurav, G. (2014). *Research methodology (Third ed.)*. New Delhi: New Age International Publishers.
- [15]. Krishna-Rao, N., & Seshagiri-Rao, K. (2014). Working Capital Leverage Revisited. Vilakshan. *The XIMB Journal Of Management*, 11(1).
- [16]. Lane, P. R., & Milesi-Ferretti, G. M. (2018). The external wealth of nations revisited: international financial integration in the aftermath of the global financial crisis. *IMF Economic Review*, 189-222.
- [17]. Madhushani, I. K., & Kawshala. (2018). The impact of financial distress on financial performance; Special reference to listed non-banking financial institutions in Sri Lanka. *International Journal of Scientific and Research Publications*.
- [18]. Martins, Branco, F., & Goncalves, R. (2019). Assessing the success behind the use of education management information systems in higher education. *Telematics and Informatics*. 182-193.
- [19]. Minyoso, J. E., & Otuya, W. (2023). A critical review on working capital management and financial distress in chartered public universities in Kenya. *African Journal of Empirical Research*, 4(2), 181-189.
- [20]. Mwariri, M. (2020). *The Association between working capital management and financial distress by listed firms in Kenya*. Nairobi: Thesis, Strathmore University.
- [21]. Mwariri, M. (2020). The Association between working capital management and financial distress by listed firms in Kenya. *Strathmore University*, 1-64.
- [22]. Ogbuji, I., & Ogunyomi, O. O. (2017). Working capital management policy and financial performance in the Nigerian foods and beverages industry: a study of Nestle Nigeria Plc (2008-2017). *Research Journal of Finance and Accounting*, 5(20), 48-63.

- [23]. Olambo, T. C., & Aluoch, M. O. (2022). Working capital management and financial performance of energy and petroleum firms listed at the Nairobi Securities Exchange, Kenya. *The Strategic Journal of Business & Change Management*, 9 (4), 288 - 310.
- [24]. Olang, A. (2021). *Relationship Between Working Capital Management And Financial Distress: A Case Of Manufacturing Industry In Rwanda*. Nairobi: Doctoral dissertation, Kca University.
- [25]. Onchangwa, G. (2019). *Effects of working capital management on financial distress of non-financial firms listed at the Nairobi securities exchange market*. Juja: Doctoral dissertation, JKUAT-COHRED.
- [26]. Sileyew, K. J. (2019). Research design and methodology. Rijeka: IntechOpen. 1-12.
- [27]. Walker, E. W. (1964). Toward a theory of working capital. *The Engineering Economist*, 9(2), 21-35.