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Abstract

Over Ksh 400 billion were given to the education sector in the 2017–2018 fiscal year, but an audit report released in 2018 found that almost a quarter of this money cannot be adequately accounted for. Another study by the Auditor General found that the government had spent 210.34 billion by the 2018/2019 fiscal year. Falsified enrollment numbers may be costing the government millions of shillings in capitation fees for public schools, according to financial data from the Ministry of Education. Thus, the study aimed to explore how various cash management techniques influence the ability of public secondary schools in Nakuru Town Sub-County to maintain a positive cash flow. The study was grounded in the Pecking Order Theory, Transaction Cost Theory, and a Monetary Theoretic Approach to cash management. An explanatory research design was employed for the investigation. The study focused on 33 public secondary schools in Nakuru Town Sub-County, with the analysis units being the principals, school bursars, and Board of Management (BOM) chairs. Given the relatively small target population, a census technique was used to include all the targeted respondents, resulting in a sample size of 99 individuals from the 33 schools. A questionnaire was used as the primary data collection method, and the Cronbach's Alpha coefficient was applied to assess internal consistency. The data were analyzed using SPSS version 24, producing both descriptive and inferential statistics, with results presented in tables. The study adhered to ethical guidelines, ensuring voluntary participation and respecting participants' privacy. The findings indicated that cash budgeting, cash policies, cash disbursement, and cash flow forecasting all significantly impacted the long-term financial viability of the public schools in Nakuru East Sub-County, Nakuru County, Kenya. The study concludes that cash management practices play a crucial role in ensuring the financial sustainability of public secondary schools in the region. Based on these conclusions, the study recommends that school management teams, including principals and their deputies, should adopt a participatory approach to budgeting by involving all relevant stakeholders throughout the process. Additionally, schools should implement more aggressive credit policies to improve their working capital and achieve financial sustainability. School management should also embrace prudence in managing surplus funds, ensuring their maximum utilization through investments in viable projects. Finally, the Ministry of Education should organize regular training sessions for secondary school principals on cash flow forecasting, especially concerning operating, financing, and investing activities, to enhance their financial decision-making capabilities.

Keywords: *Cash management practices, financial sustainability, public secondary schools, Nakuru County, Kenya*

1.0 Background of the Study

Cash management practices are fundamental to organizational performance, as poor financial understanding can undermine even the most dedicated efforts toward institutional success (Longenecker, 2016). Globally, public schools receive government funding, and their financial management practices significantly influence both their financial health and academic outcomes. In New Zealand, the Department of Education provides financing through grants for teacher salaries and operating expenses, with principals bearing responsibility for budget management and overall school leadership (Tooley, 2013). Similarly, in Greece, the ministry exercises broad authority over academic sector funding, yet head teachers face considerable challenges due to the absence of comprehensive guidelines from the Ministry of Education and Religious Affairs (MINERA) for managing school finances (Argyropoulous, 2009). Greek head teachers are solely authorized to conduct financial transactions, manage property, oversee revenues and expenditures, handle bookkeeping, tax filing, and social security contributions, and conduct internal audits—responsibilities that often exceed their training and expertise (Argyropoulous, 2009).

The African context presents similar challenges, with varying financing structures across different countries. In Nigeria, federal government-run secondary schools exist alongside state-administered institutions, with parents required to cover certain expenses despite available public subsidies (Bennell & Sayed, 2012). In Zambia, Parent-Teacher Associations (PTAs) are elected rather than voluntary and play crucial roles in raising funds for extracurricular activities, school supplies, and teacher salaries. Contrary to popular belief, parents in South Africa contribute approximately 50% of all expenses in most government-sponsored schools, highlighting the significant burden on households across these nations (Bennell & Sayed, 2012). This reality underscores the need for school administrators to develop comprehensive financial management skills, particularly given the substantial capitation funds schools receive, necessitating additional training in personal and strategic management alongside familiarity with technological developments (Mulkeen, 2015).

In Kenya, the financial viability of public learning institutions depends heavily on the financial management capabilities of principals, bursars, and Boards of Management (BOM) (Ministry of Education, 2014). Under the Education Act 2010, the BOM develops budget estimates and makes resource distribution decisions, though this governance structure has been characterized as loosely controlled and unaccountable (Buchmann, 2014). Head teachers bear responsibility for financial accounting and auditing, ensuring proper recording of all transactions in cashbooks, ledgers, diaries, and inventories, while also overseeing internal audits with assistance from bursars or accounts clerks (Onyango, 2014). The complexity of financial management at Kenya's public secondary schools is heightened by the fact that over 73% of the country's social sector expenditure is allocated to education, with households contributing between 5% and 7% of their income toward schooling (Transparency International, Kenya, 2016). Despite these significant investments, financial mismanagement persists across the sector. Financial sustainability represents the ability of an organization to continue operating and meeting its financial obligations over time through ethical and efficient resource management (Wymeersch, 2017). For schools, this encompasses generating sufficient revenue to cover personnel salaries, facility maintenance, classroom supplies and equipment, while maintaining reserves for unanticipated circumstances or economic downturns (Montgomery, 2015). Income-generating activities, such as operating school buses, farms, renting facilities for social events, gardening, and running clubs, provide crucial supplementary funding that helps defray student tuition costs (Liaqat, 2018; Pollinger & Outhwaite, 2019). Income diversification—the expansion of revenue sources beyond traditional funding—is equally

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essential, as it involves developing new, unrelated revenue streams that enhance performance and reduce risk (Ekpoh & Okpa, 2017; Fentahun, 2018). Schools that diversify their income sources and asset portfolios demonstrate greater capacity for long-term survival and growth (Sankale & Mujidi, 2019).

Cash management, defined as the technique of ensuring adequate cash availability for daily expenses, future expansion, and unforeseen costs without adversely affecting earnings, is central to organizational performance (Akinyomi, 2014). Effective cash management involves regulating both cash inflows from operating activities and asset sales, and cash outflows for debt payments and inventory purchases, with the difference between receipts and withdrawals supporting overall institutional growth (Brinchk, Soeren & Gemuenden, 2016). For public secondary schools, cash management techniques encompass cash budgeting—a tool for organizing and controlling cash flows and determining liquidity needs (Thomas, 2017; Kamath, 2016); cash policies—guidelines for handling cash that establish internal controls and define staff roles (Smirat, 2016; Kasim, Mutula & Antwi, 2017); cash disbursement—the systematic payment process that ensures proper recording and accountability (Ngware, 2018); and cash flow forecasting—the estimation of future financial conditions based on expected payments and receivables (Gillespie, 2017; Psacharopolous & Woodhall, 2018).

The significance of conducting this study is underscored by persistent financial accountability challenges in Kenya's education sector, where audit reports reveal that approximately 25% of funds cannot be properly accounted for, and forensic investigations have uncovered manipulation of cash records to conceal deficits (Transparency International, Kenya, 2016; Ngware, 2018). In Nakuru County, where government-funded secondary schools operate under the free secondary education program with BOMs and principals managing finances (Ministry of Education, 2018; Teachers Service Commission, 2018), understanding the relationship between cash management practices and financial sustainability is critical. This study examines how four key cash management practices—cash budgeting, cash policies, cash disbursement, and cash flow forecasting—affect the financial sustainability of public secondary schools in Nakuru County, measured through financial management effectiveness, income generation capacity, and income diversification. By investigating these relationships, the study addresses a critical gap in understanding how improved cash management techniques can enhance the financial viability of public learning institutions facing increasingly complex operational demands.

1.1 Statement of the Problem

A financially sustainable organization is one that can meet all of its resource and financial commitments while achieving its objectives, according to Gakuu and Kirimi (2014). Financial stability is essential to reduce the likelihood that an organization will need to seek loans to support its activities, as this would decrease its independence and increase its reliance on creditors. Ngware and Kosimbei (2019) found that secondary schools in Nakuru County with income-generating activities (IGAs) were 1.9 times more likely to own as many assets as those without IGAs. Additionally, IGA schools had a 2.2 times lower likelihood of having liabilities exceeding the median threshold. Nyamwega (2019) also discovered that public secondary schools in Nakuru County earned between Ksh 680,000 and Ksh 6,000,000 annually from income-generating ventures. These findings highlight that in-house income-generating businesses enable schools to generate additional funds for investing in further projects. However, research by Simatwa and Ayodo (2021) revealed that revenues from IGAs have been

declining, with schools now earning between Ksh 300,000 and Ksh 500,000, indicating that many schools are facing financial challenges.

In the 2017–2018 fiscal year, more than Ksh 400 billion was allocated to the education sector. However, according to an audit report from 2018 (Auditor General, 2018), nearly 25% of this money could not be adequately accounted for. By the 2018–2019 fiscal year, the government had distributed Ksh 210.34 billion, yet discrepancies persisted (Auditor General, 2019). Bursaries accounted for 12.3% of the average education budget of 33.9%, yet the funds still lacked proper accountability. According to the Ministry of Education's financial reports, falsified enrollment numbers may be costing the government millions in capitation fees for public schools (Auditor General Report, 2018-2019). The audit found that, contrary to the Public Procurement and Disposal Act of 2015, nearly half of the unaccounted-for funds were lost through indirect procurement. The report also noted that some schools awarded contracts to vendors without approval from the required bidding committees. A review of financial records in Nakuru County revealed instances of funds being moved from one account to another without proper authorization. Despite the substantial funding provided by the government, it is evident that some schools are still facing significant financial difficulties. This issue may be attributed to insufficient funds or poor cash management practices (Mobegi, 2012).

Several studies have examined how cash management practices influence financial outcomes. For example, Yousef (2017) explored the impact of cash management on the profitability of Egyptian food processing enterprises, while Belal (2018) investigated the financial management practices of floral companies. Simirat (2016) focused on the cash management strategies employed by small and medium-sized businesses (SMEs) in Jordan, highlighting issues such as insufficient cash management practices and improper account preparation, which often lead to business closures (Gemuenden, 2016). However, none of these studies have been conducted in the context of schools, creating a gap in the literature. This study seeks to address this gap by examining how cash management practices affect the ability of public secondary schools in Nakuru Town Sub-County, Nakuru County, to maintain financial stability.

1.2 Objectives of the Study

- i. To establish the effect of cash budget on the financial sustainability of public secondary schools in Nakuru Sub-County, Nakuru County, Kenya
- ii. To examine the effect of cash policies on the financial sustainability of public secondary schools in Nakuru Sub-County, Nakuru County, Kenya
- iii. To determine the effect of cash disbursement on the financial sustainability of public secondary schools in Nakuru Sub-County, Nakuru County, Kenya".
- iv. To establish the effect of cash flow on the financial sustainability of public secondary schools in Nakuru Sub-County, Nakuru County, Kenya.

1.3 Research Hypotheses

The hypotheses of the study were:

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H0₁: Cash budget has no significant effect on financial sustainability of public secondary schools in Nakuru East Sub- County, Nakuru County, Kenya.

H0₂: Cash policies have no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya.

H0₃: Cash disbursement has no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya.

H0₄: Cash flow forecasting has no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya.

2.0 Literature Review

The chapter details literature review on the study variables. The review presents an overview of the literature, a theoretical analysis, an empirical analysis and a conceptual analysis.

2.1 Theoretical Review

Pecking order theory, transaction cost theory, and a monetary theoretic approach to cash management, as described below served as the study's guiding principles.

2.1.1 Pecking Order Theory

The Pecking Order Theory was developed by Myers in 1984 and later expanded by Myers and Majluf (1984). It posits that firms follow a hierarchical order when deciding how to finance their activities and projects, starting with internal funds, followed by debt, and lastly, equity issuance as the least preferred option. This theory is based on information asymmetry, where managers have more information about the firm's prospects and financial status than outside investors. According to Myers and Majluf (1984), borrowing is viewed positively by investors as it signals confidence, while issuing equity may be seen negatively, signaling that the company is overvalued (Correa, Basso & Nakamura, 2007). The theory suggests that firms should maintain higher levels of cash reserves and illiquid assets to meet their obligations (Chen, 2004). This theory was particularly relevant to the current study as it informs the objective of understanding the role of cash budgeting in financial sustainability. In the context of public secondary schools, the pecking order theory suggests that schools would use their internal resources first, such as reserves or income from income-generating activities, to cover immediate expenses, reducing reliance on external borrowing. By focusing on internal cash flow management, schools can maintain financial stability without resorting to debt or external funding, especially in a highly regulated sector like education

2.1.2 Transaction Cost Theory (TCT)

The Transaction Cost Theory (TCT) was originally introduced by Commons in 1934 and later developed by Williamson in 1991. The theory argues that businesses incur transaction costs when managing their operations, and these costs arise from the need to make exchanges within or outside the organization. According to Coase (2015), transaction costs refer to the expenses associated with organizing and executing market exchanges. Firms can reduce these costs by either integrating vertically (doing business in-house) or transacting externally if it is more cost-effective. Transaction Cost Theory emphasizes that businesses must consider the costs of

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carrying out transactions internally versus externally, including factors like opportunism, asset specificity, and environmental uncertainties (Heide, 2016). In the context of the current study, TCT was relevant to the objective of examining how cash policies impact financial sustainability. The theory helps explain that schools should optimize their internal cash management mechanisms, like budgeting, disbursement, and forecasting, to reduce unnecessary costs and improve efficiency. By implementing sound policies and procedures internally, schools can minimize external financial costs, ensuring financial sustainability while avoiding risks associated with market transactions. This aligns with the study's goal of enhancing financial control through improved internal cash management

2.1.3 Monetary Theoretic Approach to Cash Management

The Monetary Theoretic Approach to Cash Management was proposed by Kiyotaki and Wright in 1989. This theory views cash management in firms as similar to managing inventories of goods. Just as companies manage stocks of products to meet their business obligations, they manage cash reserves to ensure that they can fulfill financial obligations when they arise. The theory underscores that economic activity increases when the money supply increases, while price levels and quantities of goods and services will also rise (Liberto & Kelly, 2012). The key tenets of this theory include the equation $MV = PQ$, where M is the money supply, V is the velocity of money, P is the price level, and Q is the quantity of goods and services. The relevance of this theory to the current study was found in its application to cash flow forecasting as a predictor of financial sustainability. The theory's insight that cash reserves should be managed like inventories informs schools' strategies for predicting and controlling cash inflows and outflows, ensuring that funds are available for daily operations, expansion, and unforeseen expenses. By adopting robust forecasting methods, schools can enhance their financial sustainability by maintaining optimal liquidity and minimizing insolvency risks

2.2 Empirical Review of Literature

In 2015, Lawal and Okoli conducted a study on financial management and budgeting in government-owned companies, using primary data sources. The findings revealed that the participation of all relevant stakeholders in budget preparation is essential for achieving accountability and, ultimately, greater sustainability. This requires a clear understanding of how an organization's desired future compares to its current state. While the study highlighted budgeting, it did not explore additional cash management strategies such as cash policies, cash disbursements, and cash flow projections. The focus was solely on budgetary management. In Kisii County, Kenya, Muthama Muturi and Abuga (2016) explored the impact of cash budgets on the operations of various public hospitals. Primary data were collected through questionnaires. The study found that maintaining daily records of cash payments and revenues in hospitals helped ensure accountability, which improved operational efficiency. Cash budgets were shown to support the creation of cash flow estimates, guarantee fiscal responsibility, and regulate spending patterns within hospitals. This earlier study focused on operational performance, whereas the current research is more concerned with financial sustainability in public secondary schools, as opposed to public hospitals.

Onduso (2016) examined the relationship between budgets and the financial performance of manufacturing entities in Nairobi. Using a cross-sectional design, the study found that budgets significantly improve financial management. However, the current study is focused on public secondary schools in Nakuru East Sub-County, differing from Onduso's focus on manufacturing companies in Nairobi. Similarly, Koech (2015) investigated how budgetary restrictions affect the financial outcomes of Kenyan manufacturing businesses. The study used

a descriptive research design and stratified sampling to select the ten largest enterprises in each cluster of manufacturing firms. It was found that the budgets of the firms were guided by clear goals and objectives, impacting their financial performance. In contrast, the current study focuses on learning institutions rather than manufacturing enterprises.

To better understand the effect of budgetary control on financial performance, Pimpong and Layrea (2016) studied non-bank financial institutions in Ghana. Using a quantitative design, the study showed that budget coordination had a significant impact on performance. While the context of their study was the banking sector in Ghana, the present study focuses on public secondary schools in Kenya. Apuoyo (2017) examined the relationship between business policies and profitability using data from 55 companies listed on the Nairobi Securities Exchange (NSE). The study found that improvements in working capital contributed to increased profitability. However, this study was based on firms listed on the NSE, whereas the current research focuses on public secondary schools in Nakuru County. Godwin (2016) conducted research on how cash management practices affected profitability at Bank of Africa in Uganda. Data were gathered via questionnaires, and the study revealed that the bank's cash management practices significantly influenced its profitability levels. This study emphasizes the financial performance of African banks, whereas the current study is concerned with the financial viability of public secondary schools.

Shaban (2017) explored the influence of financial and cash policies on performance and risk evaluation at the Amman Stock Exchange market. Data were gathered through questionnaires, with 180 of 200 returned and deemed suitable for analysis. The study concluded that cash and financial policies influence the investment climate. However, unlike Shaban's focus on stock exchanges, the present study investigates learning institutions in Nakuru. Pietropapa (2016) studied internal control systems and cash management practices in non-governmental organizations (NGOs). Using a descriptive and analytical research design, primary data were collected through questionnaires, while secondary data were sourced from existing records and documents. The study concluded that NGOs lacked internal auditors and failed to update training curricula, which hindered effective cash management. This study differs from the current research, which focuses on public secondary schools.

Tuwei (2017) sought to determine whether cash disbursement and cash collection procedures were linked to the performance of state entities in Kenya. The study, which focused on 13 state firms in Uasin Gishu County, found that cash disbursement and collection techniques significantly impacted service provision. While this study addressed state corporations, the current study focuses solely on public secondary schools. Ndirangu (2017) assessed the impact of cash flow forecasting on the financial management of companies listed on the NSE. The study, which used secondary data from financial statements spanning 2010 to 2016, found that cash flow forecasting slightly enhanced financial management. The present study, however, focuses on schools in Nakuru County, providing a comparison to Ndirangu's focus on NSE-listed companies.

Gilbert (2015) researched cash flow forecasting in student housing facilities at Kwame Nkrumah University of Science and Technology. The study found that most student hostels did not follow good financial management practices, particularly regarding cash budgeting, control, and disbursement. This differs from the current study, which focuses on public secondary schools in Kenya. Oyieko (2018) examined the effect of cash flow management activities on the financial management of industrial businesses listed on the NSE. The study,

which used secondary data from manufacturing firms, found that financing cash flows had negative correlations with return on assets, while operational and investment cash flows had positive correlations with return on equity. This contrasts with the present study, which investigates public secondary schools' financial sustainability rather than industrial firms.

Maina and Oluoch (2016) explored the connection between investment capital flows and business success. The study revealed that firms' cash inflows and outflows, including investments, are crucial for understanding financial health. While this research focused on business performance, the present study aims to assess financial sustainability in public schools. Mong'o (2018) studied the relationship between cash flows used for investing and the profitability of Kenyan commercial banks. The findings showed that cash flow investments positively affected profitability. This study's focus on financial institutions contrasts with the current study's emphasis on the financial sustainability of public secondary schools.

2.3 Conceptual Framework

Conceptual framework covers concepts that provide explain a given trend or phenomena (McGaghie, 2000). Figure 1 is the conceptual framework

Independent Variables

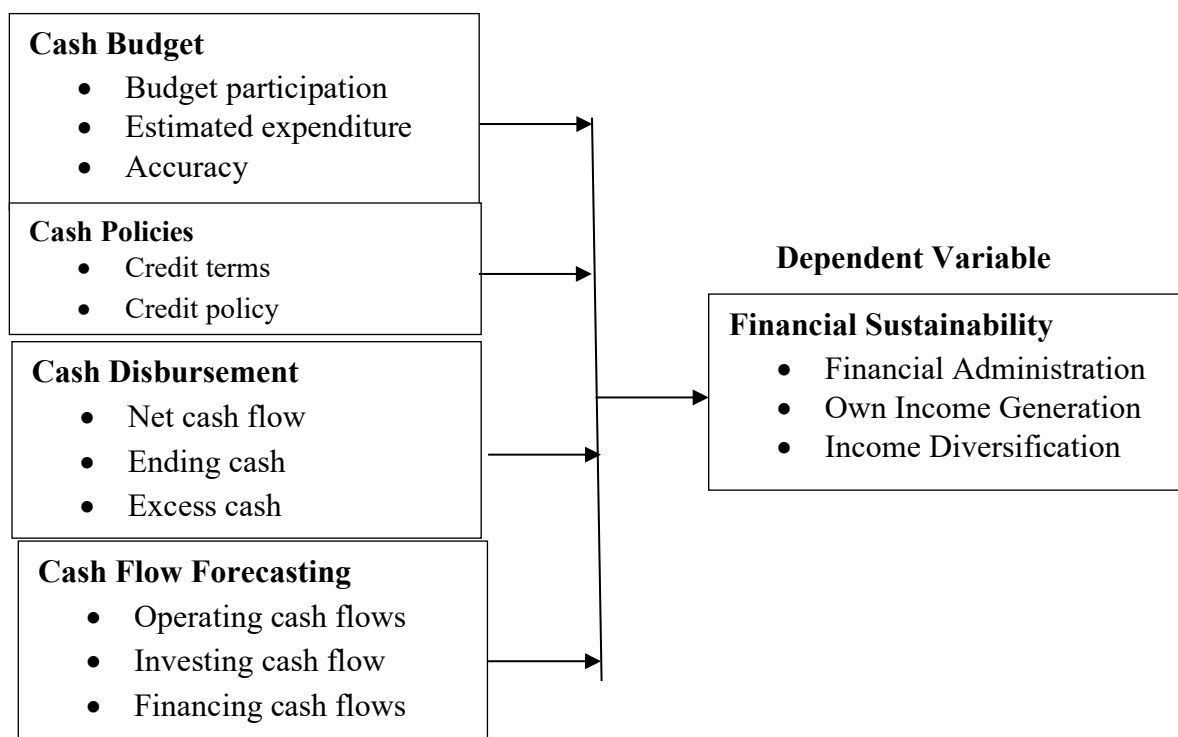


Figure 1: Conceptual Framework

3.0 Research Methodology

The study employed an explanatory research design, which according to Cooper and Schindler (2011), involves thorough planning of data collection methodology and analysis procedures while considering the investigation's goals, personnel, time, and financial resources. This design was chosen because it provides researchers with latitude to adapt to changes during the

investigation process, is cost-effective, and helps lay the groundwork for future research (Durrheim, 2014). The target population comprised 99 respondents consisting of principals, school bursars, and Board of Management (BOM) chairs from 33 public secondary schools in Nakuru East Sub-County (Ministry of Education, 2021). Given the small size of the target population, a census technique was employed to incorporate all 99 respondents, which increased the reliability of the study as all respondents were allowed to participate (Mugenda & Mugenda, 2012). Data was collected using structured questionnaires with a five-point Likert scale ranging from strongly agree to strongly disagree, measuring four independent variables (cash budget, cash policies, cash disbursement, and cash flow forecasting) and one dependent variable (financial sustainability). Validity was established through supervisor recommendations for content validity and pilot study for face validity (Kothari, 2004), while reliability was assessed using Cronbach's Alpha coefficient, with values of 0.70 or higher considered acceptable (Kothari, 2004; Mugenda & Mugenda, 2006).

Data analysis was conducted using SPSS version 24, employing both descriptive statistics (means and standard deviations) and inferential statistics (multiple regression analysis) to explore the relationship between study variables through the model: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$, where Y represents financial sustainability and X_1 , X_2 , X_3 , and X_4 represent cash budget, cash policies, cash disbursement, and cash flow forecasting respectively. The appropriateness of the regression model was evaluated through diagnostic tests including linearity test using scatter plots (Linnet & Moons, 2012), normality test using the Shapiro-Wilk test (Collins & Altman, 2012), and multicollinearity test using Variance Inflation Factor (VIF) values, with acceptable VIF values being less than 10.00 (Eusebi, 2016). Ethical considerations were strictly observed, including obtaining authorization from the university administration, National Commission for Science, Technology, and Innovations (NACOSTI), and school management, ensuring voluntary participation without coercion, maintaining confidentiality of information, and protecting participants' privacy by not requiring them to enter their identities on the research questionnaire. The data collection procedure began after successful defense of the research proposal and resolution of emerging issues, followed by obtaining necessary permits from NACOSTI and the sub-county education officer before distributing questionnaires to respondents in each school.

4.0 Data Analysis, Presentation and Discussion

This chapter is structured into the following sections: response rate, reliability results, descriptive statistics, regression analysis, and hypothesis testing. The discussion links the findings with the literature reviewed, providing a deeper analysis and context.

4.1 Response Rate

A total of 99 study tools were administered to the participants, and 73 were successfully returned, resulting in a 72% response rate, which aligns with the findings of Yin (2017). The details of the response rate are presented in Figure 2.

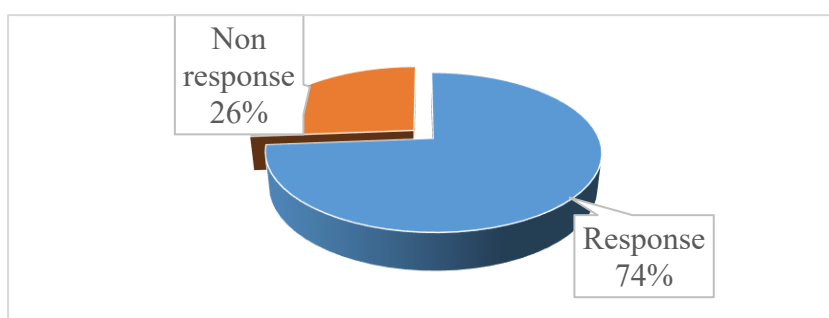


Figure 2: Response Rate

4.2 Descriptive Statistics

Subsequent sections cover descriptive statistics:

4.2.1 Cash Budget

Table 1 provides a breakdown of the descriptive statistics for the cash budget, which is the first objective variable that guided this study.

Table 1: Cash Budget

Statement	Mean	Std. Dev
The school prepares its budget with the participation of all parties.	3.76	.697
The staff's involvement in the budget aids in the development of future curricula and instructional methods.	3.69	.758
Budget practice and procedure is in line with the MOE recommendations	3.68	.814
Budgeting assists with allocating spent money for personnel, resources, and administrative activities in schools.	4.08	.702
After extensive consultations with the parents and other stakeholders, capital expenses are allocated for	3.84	.860
Average score	3.82	.767

The findings were that respondents agreed that budgeting assisted with allocating spent money for personnel, resources, and administrative activities in school ($M=4.08$, $SD=0.702$) and that after extensive consultations with the parents and other stakeholders, capital expenses were allocated for in most of the studied schools ($M=3.84$, $SD=0.860$). This means that budgeting played a crucial role in expenditure and that it was collaborative effort. Respondents further agreed that their school prepared its budget with the participation of all parties ($M=3.76$, $SD=0.697$), staff's involvement in the budget aided in the development of future curricula and instructional methods ($M=3.69$, $SD=0.758$) and that budget practice and procedure was in line with the MOE recommendations ($M=3.68$, $SD=0.814$). On overall, Table 1 indicates the average score as $M=3.82$, this means that it was apparent from respondents that cash budgeting had been embraced by their schools. The finding agrees with Muthama Muturi and Abuga (2016) who conducted research on how cash budgets impacted the operation of different public hospitals. The study noted that cash budgets support the creation of cash flow estimates, guarantee fiscal responsibility, and manage spending patterns within a hospital without encouraging politics or resource competitiveness.

4.2.2 Cash Policies

Table 2 presents the descriptive statistics for cash policies

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Table 2: Cash Policies

Statement	Mean	Std. Dev
Tuition costs are calculated using credit terms.	3.78	1.091
The financial needs of the school are determined using the schools' credit terms.	3.72	.870
Which vendors are given credit and billed depends on the credit policies.	3.82	.652
The conditions of payments for those to whom credit is granted are determined by credit policies.	3.64	.839
Credit is used to purchase school supplies.	4.18	.869
Average score	3.83	.865

Participants in the study agreed that credit was used to purchase school supplies ($M=4.18$, $D=.869$) and that which vendors were given credit and billed depended on the credit policies ($M=3.82$, $SD=.652$). This implies that credit was an important aspect of cash policy in the studied schools. Respondents of the study further agreed that tuition costs were calculated using credit terms. ($M=3.78$, $SD=1.091$), financial needs of the school were determined using the schools' credit terms ($M=3.72$, $SD=.870$) and that the conditions of payments for those to whom credit was granted were determined by credit policies. ($M=3.64$, $SD=0.839$). On overall, the mean value of 3.83 implies that cash policies were in place in most of the studied schools. These policies according to Godwin (2016) can help in prevention of financial fraud from an institutional point of view.

4.2.3 Cash Disbursement

Table 3 provides a summary of the descriptive statistics for cash disbursement

Table 3: Cash Disbursement

Statement	Mean	Std. Dev
The school's available capital is shown via net cash flow.	3.62	.559
The school is able to pay off its debts thanks to the net cash flow.	3.52	.902
The school's positive net cash flow enables it to increase its inventory.	3.69	.981
To cover costs, the school uses ending cash flow.	3.54	.512
The schools can reinvest their surplus income flow in worthwhile projects.	3.61	.827
Average score	3.60	.757

Source: Research Data (2025)

The results in Table 3 indicate that respondents generally agreed that the school's positive net cash flow enabled it to increase its inventory ($M = 3.69$, $SD = 0.981$). The available capital was also shown through net cash flow ($M = 3.62$, $SD = 0.559$), and the schools could reinvest their surplus income into worthwhile projects ($M = 3.61$, $SD = 0.827$). Respondents further agreed that the school used ending cash flow to cover costs ($M = 3.54$, $SD = 0.512$) and was able to pay off its debts thanks to the net cash flow ($M = 3.52$, $SD = 0.902$). Overall, the mean score was 3.60, indicating that respondents agreed with the various statements about cash disbursement practices in their schools. This average score of 3.60 suggests that the schools implemented relevant mechanisms to foster effective cash disbursement. These findings align

with Hamza, Mutala, and Antwi (2015), who noted that the existence of effective cash disbursement practices enhances organizational effectiveness.

4.2.4 Cash Flow Forecasting

The findings on cash flow forecasting are presented and summarized in Table 4.

Table 4: Cash Flow Forecasting

Statement	Mean	Std. Dev
The school makes an estimate of the projects' operational costs.	3.79	.644
Forecasting the operating expenses assists the schools in monitoring past-due payments.	3.53	.898
The schools are able to invest in more fruitful projects by using investment cash flow forecasting.	4.06	.535
Schools can determine the inflow and outflow of funds by forecasting the financing cash flows.	3.78	.869
Forecasting financial flows aids the school in keeping track of its debts.	3.78	.448
Average score	3.79	.680

Source: Research Data (2025)

Participants were in agreement that the schools were able to invest in more fruitful projects by using investment cash flow forecasting ($M=4.06$, $SD=0.535$), the school made an estimate of the projects' operational costs. ($M=3.79$, $D=0.644$) and that besides determining the inflow and outflow of funds by forecasting the financing cash flows ($M=3.78$, $D=0.869$). Respondents further agreed that forecasting financial flows aided the school in keeping track of its debts ($M=3.78$, $SD=.448$) and that forecasting the operating expenses assisted the schools in monitoring past-due payments ($M=3.53$, $SD=0.898$). This finding agrees with Ndirangu (2017) who noted that effective cash flow forecasting ha direct bearing on organizational performance of an organization.

4.2.5 Financial Sustainability

Table 5 provides an overview of the findings on financial sustainability

Table 5: Financial Sustainability

Statement	Mean	Std. dev
The school's methods for managing its finances have improved.	3.63	.589
The school manages its finances using computerized tools like Quick Books.	3.79	.644
The school engages in profitable ventures including producing cash crops and raising livestock.	3.60	.968
Over the past year, income from income-producing activities has grown.	3.98	.735
Because the school is able to divert income to other initiatives, performance has improved.	3.94	.779
Average	3.79	.743

Source: Research Data (2025)

Table 5 indicates the average value of financial sustainability as 3.79, thus participants' means agreed on the statements that had been set out on each of the items. More specifically,

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respondents agreed that over the past year, income from income-producing activities had grown ($M=3.98$, $SD=.735$) and that diverting of income had improved performance of the school ($M=3.94$, $Std. Dev=0.779$). Respondents also agreed that the school managed its finances using computerized tools like Quick Books ($M=3.79$, $SD=0.644$) and that the school's methods for managing its finances had improved ($M=3.63$, $Std. Dev=.589$). The implication of the findings in Table 5 is that financial sustainability was a goal in most of the studied secondary schools in this study. This finding agrees with Wymeersch (2017) who regarded financial sustainability as an ability of the institution to continue operating and meet its financial obligations over time is referred to as financial sustainability.

4.3 Diagnostic Tests

The following diagnostic tests were performed in this study.

4.3.1 Linearity Test

Both the correlation analysis and the linear regression analysis require a linearity test. Linearity is the presence of a straight line between the predictor variables in the regression and the outcome variable. Utilizing scatterplot testing strategies, linearity can be evaluated. The data points are arranged in an oval pattern to demonstrate linearity. Scatter plots can be ideal in testing for linearity assumption (Linnet & Moons, 2012). Figure 3 gives a breakdown of how linearity was established in the present study. H_0 : alignment of data points along PP line indicates linearity

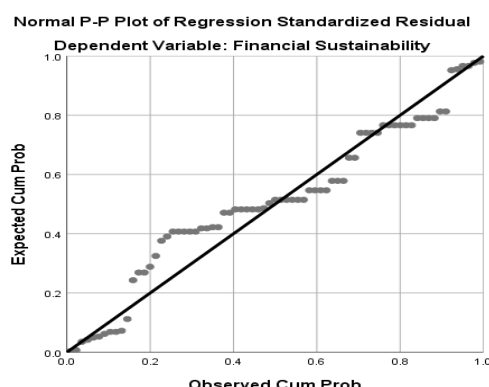


Figure 3: Linearity Test

Source: Research Data (2025)

From Figure 3, most of the data points are seen aligned along the normal PP line. This is a pointer that the data adopted for analysis in this study had linearity properties and hence hypothesis H_0 : There is a linear relationship between the independent and dependent variables was accepted.

4.3.2 Normality Test

The Shapiro-Wilk test is considered to be the most effective method for assessing if numerical data is normal. Examples of graphical approaches include the histogram and normalcy plot (Collins & Altman, 2012). The findings were established and summarized as shown in Table 6. The null hypothesis H_0 was that p-value above 0.05 indicate normality assumption.

Table 6: Normality Test

	Kolmogorov-Smirnovb			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cash Budget	.177	14	.200*	.882	14	.062
Cash Policies	.351	10	.001	.722	10	.342
Cash Disbursement	.261	25	.000	.765	25	.112
Cash Flow Forecasting	.270	16	.003	.747	16	.341
Financial Sustainability	.261	25	.000	.765	25	.123

Source: Research Data (2025)

From Table 6, all the p-values obtained from the Shapiro-Wilk test were above the significance level of 0.05. This indicates that we failed to reject the null hypothesis (H_0 : The data is normally distributed) for all the datasets examined. Consequently, we can conclude that there was no statistically significant evidence to suggest a deviation from normality in the data adopted and used for analysis in this study.

4.3.3 Multicollinearity Test

Multicollinearity occurs when there is a significant connection between your predictor variables. Only multiple linear regressions with plenty of predictor variables are covered by the premise. VIF values were computed to test for multicollinearity in the data set. The ideal case situation would be if these numbers were less than 5.00, but when using VIF values, they must be less than 10.00. According to Eusebi (2016), VIF values were obtained for this study in order to assess multicollinearity. The null hypothesis H_0 was that VIF values 1-10 indicate absence of multicollinearity.

Table 7: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
Cash Budget	.346	2.887
Cash Policies	.426	2.348
Cash Disbursement	.673	1.487
Cash Flow Forecasting	.991	1.009
Average	.609	1.933

Source: Research Data (2025)

The findings presented in Table 7 reveal a mean Variance Inflation Factor (VIF) value of 1.933. This value falls comfortably within the generally accepted range of 1-10, a threshold commonly used to indicate the absence of multicollinearity. Consequently, based on these VIF values, we accept the null hypothesis H_0 : There is no significant multicollinearity among the independent variables in the proposed study. The data adopted and used to support the analysis in this study does not exhibit multicollinearity as a significant symptom.

4.4 Regression Results and Hypotheses Testing

This section details the findings of regression analysis that was aimed at testing the formulated hypotheses of the study. Table 8 reports the findings of the regression model summary.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.939 ^a	.881	.874	.47543

Source: Research Data (2025)

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From the findings in Table 8, the value of adjusted R squared was recorded as 0.874, this shows that 87.4% change in financial sustainability of the studied schools can be explained by their cash management practices. This also implies that there exist some additional factors aside from cash management practices that can influence the remaining 12.6% of financial sustainability of the studied schools which should be the focus of future scholars and studies. Table 9 presents the ANOVA findings.

Table 9: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	113.616	4	28.404	125.664	.000 ^b
Residual	15.370	68	.226		
Total	128.986	72			

Source: Research Data (2025)

Shown in Table 9 is the fact that the overall regression model that was adopted in this study was generally significant and thus fit for predicting the effect of cash management practices on financial sustainability ($F=125.664$, $p<0.05$). The findings of regression beta coefficients and significance as determined in this study are as indicated in Table 10.

Table 10: Regression Coefficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.147	2.352		4.315	.000
Cash Budget	.801	.131	.433	6.115	.000
Cash Policies	.329	.083	.099	3.964	.026
Cash Disbursement	.638	.120	.697	5.317	.000
Cash Flow Forecasting	.338	.036	.045	9.389	.021

Source: Research Data (2025)

From Table 10, the following model is fitted between cash management practices and financial sustainability:

$$Y = 10.147 + 0.801X_1 + 0.329X_2 + 0.638X_3 + 0.338X_4$$

Y is the Financial Sustainability; X_1 is the Cash Budget; X_2 is the Cash Policies; X_3 is the Cash Disbursement; X_4 is the Cash Flow Forecasting

4.5 Hypotheses Testing

The hypotheses of formulated in this study were tested as indicated in the subsequent sections:

4.5.1 Cash Budget and Financial Sustainability

The first hypothesis H_{01} was that cash budget has no significant effect on financial sustainability of public secondary schools in Nakuru East Sub-County, Nakuru County, Kenya. From the findings, the p-value of cash budget was 0.000 i.e. $p<0.05$ hence the variable was significant. Thus, hypothesis H_{01} was rejected. This finding agrees with Muthama, Muturi and Abuga (2016) who conducted research on how cash budgets impacted the operation of

different public hospitals. It was noted that cash budgets support the creation of cash flow estimates, guarantee fiscal responsibility, and manage spending patterns within a hospital without encouraging politics or resource competitiveness. Similarly, Onduso (2016) indicated that budgets significantly improve financial management for manufacturing companies as measured by return on assets. Pimpong and Layrea (2016) revealed a moderately positive and statistically significant relationship between budget coordination and business performance.

4.5.2 Cash Policies and Financial Sustainability

The second hypothesis H_{02} was cash policies have no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya. The findings of regression analysis indicated the p-value as 0.026 i.e. $p < 0.05$. Therefore, hypothesis H_{02} was rejected. Thus, it can be deduced that cash policies are significant predictors of financial sustainability. The finding concurs with Godwin (2016) who demonstrated that Bank of Africa's cash management practices affected the organization's profitability levels. Shaban (2017) examined how the financial and cash policies of the Amman stock exchange market affected its performance and risk evaluation and noted that the investment climate is influenced by cash and financial policy.

4.5.3 Cash Disbursement and Financial Sustainability.

The focus of the third hypothesis was H_{03} cash disbursement has no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya. The findings from regression analysis indicated the p-value as $p = 0.000$ i.e. $p < 0.05$. Therefore, the null hypothesis H_{03} was rejected. It then follows that cash disbursement was a significant enabler and predictor of financial sustainability of public secondary schools in Nakuru. This finding is well aligned with Tuwei (2017) who demonstrated that the manner of funding collection has a positive and significant impact on how well state corporations function. A study by Khan (2016) investigated consumer perceptions of various cash disbursement strategies. The result demonstrates that the type of cash disbursement has a significant influence on the volume and cost of purchases.

4.5.4 Cash Flow Forecasting and Financial Sustainability

The study had the last hypothesis as H_{04} cash flow forecasting has no significant effect on financial sustainability of public school in Nakuru East Sub- County, Nakuru County, Kenya. The results were that forecasting had p-value as $p = 0.021$ that is $p < 0.05$. Therefore, hypothesis H_{04} was rejected. Hence, the study inferred that forecasting was a significant enabler and predictor of financial sustainability of financial sustainability of public schools in Nakuru. This finding agrees with Ndirangu (2017) who found that cash flow forecasting slightly enhanced financial management. Shin (2016) studied the relationship between the disclosure of analysts' cash flow projections and accounting data in Korea. These results show how the investor-manager knowledge gap can be reduced by utilizing the rich information environment.

5.0 Conclusion

The study concludes that cash budgeting plays a critical role in enhancing the financial sustainability of public secondary schools. Specifically, it finds that effective cash budgeting can lead to a more controlled and predictable financial environment, which is essential for maintaining long-term sustainability. Efforts to improve cash budgeting practices, such as involving key stakeholders in the budgeting process, can significantly improve the ability of schools to allocate resources efficiently and meet financial obligations. Moreover, the study

establishes that sound credit policies are a foundational component of financial sustainability. Schools that establish and enforce clear, effective credit policies are better positioned to manage their cash flows, reduce financial risks, and ensure that they can meet their financial commitments. The study also highlights the importance of effective cash disbursement mechanisms, concluding that schools with well-organized disbursement procedures are better able to manage their financial resources. Enhancing cash disbursement practices can help schools optimize the use of their funds, leading to improved financial sustainability. Finally, the study concludes that cash flow forecasting is a significant enabler of financial sustainability. By improving their ability to forecast cash flows accurately, schools can make informed decisions about expenditures and investments, which ultimately strengthens their financial position.

6.0 Recommendations of the Study

The study recommends that the management teams of public secondary schools, including principals and their deputies, should adopt a more participatory approach to budgeting. This means that all relevant stakeholders-such as school staff, the Board of Management (BOM), and possibly even parents-should be involved in the budgeting process. Such involvement will help ensure that the budgeting process is transparent, inclusive, and aligned with the school's strategic objectives. By fostering collaboration and ensuring that the budget reflects the needs and priorities of the entire school community, the financial management of the school is likely to improve, contributing to greater financial sustainability. This approach will also help in securing buy-in from stakeholders, as they will feel more invested in the financial decisions made. Furthermore, the study underscores the need to review and adjust the credit policies currently in place at public secondary schools in Nakuru. Existing policies should be re-examined and potentially made more aggressive to improve working capital and ensure the efficient management of resources. The introduction of more flexible and well-defined credit terms could enhance schools' ability to manage cash inflows and outflows, reduce reliance on external funding, and improve their financial health. This adjustment is essential for schools striving to achieve financial sustainability in an environment that increasingly demands accountability and financial prudence.

Additionally, it is crucial for school management to regularly review and enhance cash disbursement procedures. Effective cash disbursement mechanisms will not only ensure the proper allocation of funds but also help in tracking and controlling expenses. By improving the management of surplus funds, schools can reinvest in vital areas, such as infrastructure and educational programs, which will further enhance their sustainability. Finally, the study suggests that the Ministry of Education should organize regular training sessions for secondary school principals on cash flow forecasting, with a particular focus on operating, financing, and investing activities. By equipping school leaders with the skills to accurately forecast cash flows, they will be better prepared to make strategic financial decisions and improve the overall financial health of their schools.

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