

Budgetary Control System and Effective Public Financial Management: Moderating Effect of Managerial Experience of Tertiary Institutions in Bayelsa State

¹Ebimobowei Appah & ²Edisebra Paul Ayabina

Isaac Jasper Boro College of Education, Sagbama, Bayelsa State, Nigeria

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Abstract: *This paper assesses the moderating effect of managerial experience on the relationship between budgetary control system and effective financial management of tertiary institutions in Bayelsa State, Nigeria. The study adopted survey research design and the population consisted of all the tertiary institutions in Bayelsa State and random sampling was utilized. Primary and secondary sources of data collection was employed with questionnaire as the major instrument of data collection after validity and reliability tests. A total of 343 questionnaires were administered and 241 was used for data analysis. The responses obtained from the administered questionnaires were statistically analysed using univariate, bivariate and multivariate statistics. The findings revealed a positive and significant relationship between budgetary planning, budgetary coordination, budgetary monitoring, budgetary participation and budgetary reporting on cash flow management of tertiary institutions in Bayelsa State, Nigeria. Also, a positive and significant moderating effect of managerial experience on the relationship between budgetary control system and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The paper concludes that budgetary control systems are a significant determinant of cash flow management and managerial experiences moderate significantly the association between budgetary control systems and cash flow management of tertiary institutions in Bayelsa State. The paper recommends amongst others that tertiary institutions should prioritise managerial experience in the recruitment, promotion, and retention of financial and administrative staff since experienced staff possess deeper understanding and intuition regarding budgeting systems, leading to better cash flow monitoring and control.*

Keywords: budgetary planning, budgetary monitoring, budgetary participation, managerial experience, cash flow management.

INTRODUCTION

Nigeria's public sector faces several issues with accountability, transparency, and financial management, to a great extent like several other emerging economies. Nigeria confronts challenges with poor infrastructure, socioeconomic disparities, and unsatisfactory social service provision across a variety of governmental sectors, despite its wealth of natural and human resources. Effective budgeting and budgetary control systems are also major concerns in Nigerian public financial management (Olaniyan & Efuntade, 2020). Ariyo-Edu and Woli-Jomh (2024) stated that the public sector in Nigeria has been faced with the challenges of financial mismanagement, inefficient utilization of public finance, unexplained wealth, and poor performance. Isaac et al (2024) argued that these issues have made it very difficult to undertake development initiatives and have worsened socioeconomic problems in Nigeria. Hence realizing sustainable public sector expenditure has been demanding due to repeated deviations from projected spending due to the absence of resilient and durable budgetary management measures (Etale & Idumesaro, 2021). Consequently, the government in Nigeria should promote effective financial management. Therefore, Isaac et al (2024) argued that budgeting and budgetary control is critical in the management of public sector finance in Nigeria. Similarly, Dare et al (2022) noted that effective budgetary control is vital to guarantee financial transparency, accountability, and fiscal responsibility. Isaac et al (2024) affirmed that budgetary controls systems would enable the tracking of public expenditure, detect financial irregularities and make public officials accountable. The authors advanced that the main benefits of budgetary control in Nigeria is the promotion of transparency and accountability in public sector finances. Also, Eunice and Iwedi, (2024) established that effective budgetary control enable government to allocate financial resources to priority sectors, ensuring that finances are directed towards projects that affects the country's growth and development.

Budgeting is very vital for the day-to-day activity of any organisation. It is a means for ensuring the execution, within a given period, of programs dealing with corporate goals and priorities using various available financial resources (Susuwu, 2020). It serves diverse functions in modern organizations. Drury (2021), Appah (2022) listed these functions to include planning annual operations, coordinating the organisation's activities, communicating plans, motivating managers, controlling activities and evaluating managers' performance. Matsosos et al (2021) noted that it is expected that the effects of budgeting and budgetary controls on organizations have attracted substantial interest among scholars (Ben-Caleb et al, 2022; Matsosos et al, 2021; Olaniyan & Efuntade, 2020; Owolabi et al, 2020). While budgeting guarantee careful planning of an organisation's future performance (Appah, 2022), budgetary control provides the structures that enable management to compare actual results with targets and implement corrective measures when deviations occur (Olaniyan & Efuntade, 2020; Owolabi et al, 2020; Matsosos et al, 2021). This understanding of budgetary control has aggravated better inquisitiveness among scholars (Matsosos et al, 2021). Ross (2020) argued that a properly planned and well-implemented budgeting and budgetary control system makes it easier for public sector organizations to achieve

its set goals and objectives. According to Ariyo-Edu and Woli-Jomh (2024), budgeting emphasizes the significant functions of managers in terms of management by objectives, uninterrupted feedback, participative management, management by exception and responsibility accounting. The authors further stated that the contemporary perspectives in budgeting's broader function include directing managerial decision-making processes and weighing the benefits and weaknesses of thoughts, in dissimilarity to conventional perspectives that limit its application to controlling expenditures. Mehryar and Surminski (2021) noted that in addition to allocating finance, budget also impact on how management responds to thoughts while taking the present and potential future economic climates into account. Romenska, et. al. (2023) stated that budget implementation and monitoring techniques must be visible and well-organized for budgeting processes to effectively distribute financial resources in accordance with priorities and strategic objectives of government.

Effective and efficient financial management system improves the performance in any organization. According to Ariyo-Edu and Woli-Jomh (2024), excellent financial management system provides the basis for the attainment of corporate goals and objectives. Appah (2022), Mihajlović et al (2020), Irawan et al (2021) noted that effective management is that financing process that organises financial activities from planning, implementation and control to financial accountability in any given organization both in the public and private sector. Sukenti (2023) argued that financial management entails excellent management of funds, which means the efficient allocation of funds in a variety of investments, as well as trying to raise funds to finance efficient investment or consumption in organizations. Sitinjak et al (2023) opined that effective financial management is necessary ingredient for growth and survival of any given organisation. The authors further argued that financial management is commonly seen as an independent activity within an organization, but it is a system of interdependent subsystems that must be coordinated for the attainment optimal goals and objectives. Brooks et al., (2020); Dubey et al., (2020); Hale et al., (2021) claimed that managing an organisation's financial resources means ensuring those finances are properly applied to further the goals and objectives of the organization. Sitinjak et al (2023) stated that effective financial management permits an organization to make the best utilization of funds for the attainment of corporate goals and objectives and to further promote the growth and survival of an organisation. The author further argued that budgeting and budgetary control are among the pillars for efficient financial management. Ariyo-Edu and Woli-Jomh (2024) argued that budgeting and budgetary control are the essential tools that provide assurance for financial restraints, the effective utilization of financial resources, and the general performance of the organization (Otieno, 2019 in Ariyo-Edu and Woli-Jomh, 2024). The authors further argued that budgeting and budgetary control are vital to the realization of sustainable socio-economic development goals of any economy.

The empirical studies portray obviously that budgeting and budgetary control is an aspect of frequent research in accounting and finance. But even though there have been several studies in this area, very little or nothing has been done on managerial experience and style on the relationship between budgetary control system and effective financial management of tertiary institution in Bayelsa State. However, Ariyo-Edu and Woli-Jomh (2024) investigated budgeting

and budgetary control on public sector performance in Kwara State, Nigeria. The findings indicated a positive and significant association between budget efficiency, effective budgetary system and budget planning and implementation on societal impact. Also, the results revealed a positive and significant association between performance-based budgeting, frequent financial reporting and regular internal audit on goals and objectives. Isaac et al (2024) conducted a study of budgetary control and public sector performance in Nigeria. The results from the multivariate analysis suggested that government revenue budget variances and government tax compliance rate positively and significant influence public funds. The findings further suggested that government revenue budget variances and government tax compliance rate positively and significant impact on government finances in Nigeria. Katana et al (2022) carried out a study on budgetary control and financial performance of listed manufacturing firms in Kenya. The results revealed that budgetary control contributed 56.1% of ROA, while the 43.9% were contributed by other factors not covered by the model. In addition, the study indicated that liquidity control significantly affects financial performance of listed manufacturing firms in Kenya. Ben-Caleb et al (2022) studied budgetary control and organizational survival of manufacturing firms in Nigeria. The results indicated that change in operating costs negatively and insignificantly influence age of firm of the sampled companies; change in operating profit positively and significantly affects age of firm and sales growth positively but insignificantly impact on age of firm. Hence, the study concluded that budgetary control is not a significant determinant of survival of sampled manufacturing companies in Nigeria. Therefore, this study attempts to fill this gap existing in existing literature and investigate the moderating influence of managerial experience on the relationship between budgetary control system and effective financial management of tertiary institution in Bayelsa State.

The findings of the study provide serious and new contributions for human resource managers, accounting and finance scholars and industrial relations experts in the domain of management research. This study contributes to knowledge by clarifying how managerial experience influence the effectiveness of budgetary control systems on financial management. The study shows that experienced managers are more capable of interpreting budget data correctly, make strategic adjustments and apply budgets for proactive decision – making. The study also demonstrates that the level of managerial experience offers a nuanced perspective that assists reconcile inconsistent findings in the literature. Further, this study strengthens the contingency theory by showing that individual managerial traits impact how control systems operate and proposing that control systems should be adapted to fit the experience profile of major decision-makers. Additionally, the findings offer critical empirical evidence for tertiary institutions in the public sector. Specifically, the objectives of the study are to: investigate the effect of budgetary planning on cash flow management of tertiary institutions in Bayelsa State, Nigeria, to evaluate the effects of budget coordinating on cash flow management of tertiary institutions in Bayelsa State, Nigeria, determine the effects of budget participation on cash flow management of tertiary institutions in Bayelsa State, Nigeria, to evaluate the effects of budget monitoring on cash flow management of tertiary institutions in Bayelsa State, Nigeria, evaluate the effects of budget reporting on cash flow management of tertiary institutions in Bayelsa State, Nigeria and investigate the moderating

influence of managerial experience on the relationship between budgetary control system and effective financial management of public tertiary in Bayelsa State. The research questions of the study are: What is the effect of budgetary planning on cash flow management of tertiary institutions in Bayelsa State, Nigeria? What is the effect of between budget coordinating on cash flow management of tertiary institutions in Bayelsa State, Nigeria? What is the effect of budget participation on cash flow management of tertiary institutions in Bayelsa State, Nigeria? What is the effect of budget monitoring on cash flow management of tertiary institutions in Bayelsa State, Nigeria? What is the effect of budget reporting on cash flow management of tertiary institutions in Bayelsa State, Nigeria? What is the moderating effect of managerial experience on the relationship between budgetary control system and effective financial management of public tertiary in Bayelsa State? The hypotheses of this study are:

H0₁: Budgetary planning positively and significantly influence the cash flow management of tertiary institutions in Bayelsa State, Nigeria.

H0₂: Budget coordinating positively and significantly influence cash flow management of tertiary institutions in Bayelsa State, Nigeria.

H0₃: Budget participation positively and significantly influence cash flow management of tertiary institutions in Bayelsa State, Nigeria.

H0₄: Budget monitoring positively and significantly influence cash flow management of tertiary institutions in Bayelsa State, Nigeria.

H0₅: Budget reporting positively and significantly influence cash flow management of tertiary institutions in Bayelsa State, Nigeria.

H0₆: Managerial experience positively and significantly moderate the relationship between budgetary control system and effective financial management of public tertiary in Bayelsa State.

REVIEW OF RELATED LITERATURE

Conceptual Review

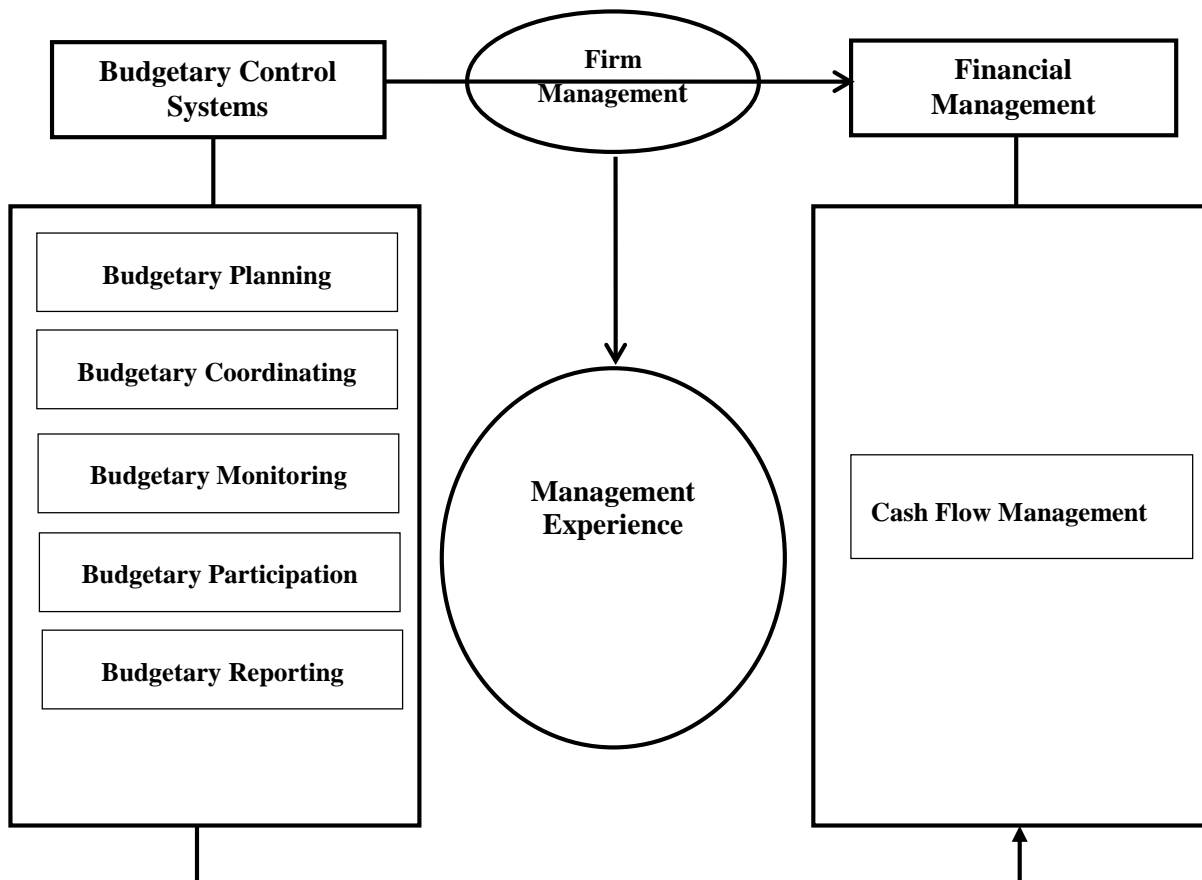


Figure 1: Conceptual Framework of Budgetary Control and Effective Financial Management

Source: Creation by the Authors (2025)

Concept of Budgetary Control System: Budgetary control can be described as a system of controlling cost which embraces the preparation of budget, coordinating the department and establishing responsibility, comparing actual performance with budgeted and acting upon results to achieve maximum performance (Egbunike & Unamma, 2017). Appah (2023), Appah (2017) stated that budgetary control is the establishment of budgets concerning the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision. Budgetary control is a system of controlling costs and resources which includes comparing actual performance with the budgeted performance and subsequently acting upon the

actual results to minimize variance and achieve maximum returns. In essence, budgetary control is purported to ensure that the activities carried out are providing the desired results. Budgetary control: refers to any management approach that involves setting some kind of targets, regularly measuring variances between the original targets and actual outcomes and motivating people to reduce those variances. Ben-Caleb (2022) argued that budgetary control a part of the general system of responsibility accounting within an organization, as costs and revenues are analyzed in accordance with area of individual responsibilities of the budget holders through permitting financial monitoring. Owolabi et al (2020), Katana et al (2022) described budgetary control is the process of employing the available financial resources, minimizing expenses, and aligning planned activities to actual results. According to Egbunike and Unamma (2017), the objective of budgetary control is to facilitate managers' plan and control the use of financial resources in systematic and logical manner to ensure that they attain their corporate financial objectives. Similarly, Owolabi et al (2020) noted that budgetary control provides support for organizations to attain organizational objectives. The authors further noted that budgetary control enable organisations in fixing goals as a move for its attainment and involves management control in which actual revenue and expenditure are compared with estimated income and expenditure, to ascertain if plans are complied with and if those plans need to review in order to make better performance. Also, Owolabi et al (2020) noted that the objective of budgetary control is to provide a forecast of income and expenditure is attained through building a model of how organizations might perform financially through strategies, events and plans are carried out effectively and efficiently.

Budgetary Planning: This is the process of creating a detailed financial plan that outlines projected income and expenditure over a specific period, typically a year. According to Appah (2023), budgetary planning involves setting financial objectives, identifying sources of income, estimating expenditure and allocating resources to attain the desired outcome. Appah (2017) noted that budgetary planning helps organisations manage their finances effectively and make informed decisions, ensures that resources are allocated efficiently and effectively to attain the desired outcome, helps identify and mitigate potential financial risks and provides a framework for strategic planning and decision making.

Budgetary Coordinating: This is the process of integrating and reconciling different budgets within an organisation to ensure that they are aligned with the organisation's overall financial goals and objectives. According to Appah (2023), budgetary coordinating helps ensuring that all budgets are consistent with each other and with the organisation's overall financial plan, avoiding duplication of effort and resources by ensuring that different budgets are not overlapping or redundant and optimising the allocation of resources across different budgets to ensure that they are being used efficiently and effectively. Appah (2017), Owolabi et al (2020) stated that budgetary coordinating helps to ensure that an organisation's financial resources are being used efficiently and effectively, Appah (2023) argued that budgetary coordinating helps to ensure that financial decisions are made with a clear understanding of organisation's overall financial situation.

Budgetary Monitoring and Control: This is the ongoing process of tracking and analysing an organisation's financial performance against its budgeted plan. According to Appah (2023), budgetary monitoring involves regularly reviewing and comparing actual financial results with budgeted amounts to identify variances, trends and areas for improvements. Olaniyan and Efuntade (2020) argued that control is the

continuous comparison of actual performance with budgets estimates. The authors further argued that the comparison of actual results to budgets will enable the budgetholders to draw conclusions concerning the efficiency of operations, product probability and pinpoint problem areas. Owolabi et al (2020), Appah (2017) argued that budgetary monitoring helps to ensure that an organisation's financial resources are being used efficiently and effectively, identify financial problems early, allowing for prompt corrective action, provides valuable insights that can inform financial decision-making. **Budgetary Participation:** This is the involvement of employees, managers and other stakeholders in the budgeting process. Appah (2023) stated that budgetary participation involves soliciting their input, ideas, and feedback to create a more inclusive and effective budget. Owolabi et al (2020) argued that budget participation is a system in which all budget holders are given the opportunity to participate in setting their budget. Appah (2017), Olaniyan and Efuntade (2020) stated that budget participation fosters open communication and collaboration among team members, employees are involved in creating the budget and provide valuable insights into a more realistic budget target. **Budgetary Reporting:** This is the process of preparing and presenting financial reports that compare actual financial results with budgeted amounts. These reports provide stakeholders with information on an organisation's financial performance, helping them make informed decisions. Appah (2023) argued that budgetary performance helps organisations manage their finances effectively, stakeholders receive timely and accurate financial information; provide valuable insights to support management allocation and organisations can allocate resources more efficiently based on budgetary report findings.

Concept of Financial Management: Financial management is the identification of the possible strategies capable of maximising an organisation's net present value, the allocation of scarce capital resources among the competing opportunities and implementation and monitoring of the chosen strategy to achieve stated objectives. Appah (2022) described financial management is the financial implications prospects of various business strategies and the strategic management of finances. It is also defined as a discipline which is concerned with planning, organising, procurement and utilisation of funds, as well as formulation and control of financial policies in order to maximise the value of the firm. Sukenti (2023) stated that financial management encompasses the full range of a company's finances including: setting objectives; identifying resources; analysing data; making financial decisions; and monitoring performance to identify problems. This study employed cash flow management and investment management as dimensions to effective financial management. This study used cash flow management as dimension for effective financial management. Cash is described as funds available to an organisation with which disbursements can be made with a view of discharging its financial obligation without any form of encumbrance (Egwu et al, 2021; Laghari et al, 2023). Cash flow is the lifeblood of any given organisation; cash is typically considered to be the most important of an organization financial resource. Appah (2022) described cash flow management is the process of keeping an eye on, evaluating, and maximizing the difference between cash inflows and outflows. Cash flow management consists of operating activities, investing activities and financing activities (Omalika et al, 2023). Omalika et al (2023), Appah et al (2021) described operating activities as those

activities that indicates how much the organisation's operations have produced enough cash flows to pay back debt, preserve the organisation's operating capacity, etc. It includes the payments and receipts for the organisation's regular operations as well as items like investing and financing that have nothing to do with the other activity group. Ogiriki et al (2020) described investing activities as cash flows that involves the purchase and sale of long-term investments and assets. These are the cash flows from the organisation's capital expenditures, acquisitions, and inter-corporate investments. Financing activities involves the cash flows from the issuance and redemption of securities used to finance the business, along with any associated costs and interest or dividends paid.

Concept of Management Experience: Managerial experience refers to the practical knowledge and skills gained by an individual through their involvement in managing and leading organisations, teams and projects (Mamadou, 2019). The author further noted that managerial experience encompasses the application of managerial theories, concepts and techniques in real world settings. Munip et al (2024) argued that managerial experience is an essential factor in motivating the success of organisations. The authors further argued that experienced managers bring a wealth of knowledge and industry insights that are critical for navigating the complex landscape of a new business. Managers' strategic thinking abilities enable them to capitalize on new opportunities and make informed decisions that foster innovation, which is essential in the dynamic and competitive business environment of today (Wu et al, 2024). Furthermore, managerial skills are fundamental in aligning organizational strategies changes, thereby with enhancing market business competitiveness (Alvarez et al, 2023). Experienced managers are adept at organizational search, a critical process for developing new strategies, products, and opportunities. Managers high quality ex ante theories and willingness to engage in search activities lead to specific and measurable search behaviours, which are very important organizational growth and adaptation (Leppanen & Eggers, 2022).

Theoretical Review

This study is grounded on the contingency theory. This theory was advanced by several scholars such as Paul Lawrence, Jay Galbraith, Henry Mintzberg, Fred Fiedler, Tushman and Romanelli, Pfeffer and others (Shala et al, 2021; Shenkar & Ellis, 2021; Dawit, 2022; Mark & Erude, 2023; Harney, 2023). This is a management theory that suggests that there is no one-size-fits all approach to management. Instead, the most effective management approach depends on the specific context and circumstances of the organisation (Harney, 2023). Dawit (2022) stated that the contingency theory seeks to investigate the association that exists between the organization and its environment. Mark and Erude (2023) observed that the contingency theory places more importance on the multivariate nature of organization and endeavour to comprehend how organizations functions under different conditions and in given situations. Dawit, (2022); Mark and Erude, (2023) and Harney (2023) noted that the benefits of this theory include the recognition that different situations require different management approaches; the provision of practical framework for managers to adapt their approach to the specific context and the acknowledgement that organisations operate in a complex and dynamic environment. Harney (2023) wrote that contingency theory suffers from

the following criticisms: it does not provide clear guidelines for managers to the follow; contingency theory may overemphasise the significance of situational factors, neglecting the role of individual features and traits; and the theory can be difficult to apply in practice, as it requires managers to have a deep understanding of the organisation's context and circumstances (Harney & Collings, 2021). This theory can be applied to study the relationship between budgetary control system and effective financial management of tertiary institutions because budgetary control systems should be designed to fit the specific needs and circumstances of the organisation and adapting to the changes in the internal and external environment.

Empirical Review

Ariyo-Edu and Woli-Jomh (2024) investigated budgeting and budgetary control on public sector performance in Kwara State, Nigeria. The study adopted cross sectional survey research design and a population of 130 staff from the Directorate of Planning, Research and Statistics (DPRS) and Directorate of Personnel and Finance and Supply (DPFS) of 5 ministries with the use of non-probability sampling to arrive at a sample size of 98 respondents. The study utilized primary source of data collection from a structured questionnaire and the questionnaire were designed using 5-point Likert scale. The study used budget efficiency, effective budgetary system and budget planning and implementation, performance-based budgeting, frequent financial reporting and regular internal audit as measurement of the independent variable budgeting and budgetary control while societal impact and goals and objectives as measures for the dependent variables. The responses obtained from the administered questionnaire were analyzing using descriptive statistics and multiple regression analysis. The findings from the data analysis indicated a positive and significant association between budget efficiency, effective budgetary system and budget planning and implementation on societal impact. Also, the results revealed a positive and significant association between performance-based budgeting, frequent financial reporting and regular internal audit on goals and objectives. Hence, the study concluded that budgetary control mechanisms have positively and significantly influence the level of public sector performance in Kwara State.

Isaac et al (2024) conducted a study of budgetary control and public sector performance in Nigeria. The study used ex post factor research design and secondary data were collected from several government statistical agencies. The study independent variable budgetary control utilized government revenue budget variances and government tax compliance rate as measurements while public revenue budget and budget expenditure budgets were employed as measures for the dependent variable public sector performance. The data collected from the secondary sources were analysed using univariate and multivariate analysis. The results from the multivariate analysis suggested that government revenue budget variances and government tax compliance rate positively and significant influence public funds. The findings further suggested that government revenue budget variances and government tax compliance rate positively and significant impact on government finances in Nigeria. The study further concluded that performing variance analysis

on public sector revenue budgets positively and significantly influences the financial health of government in Nigeria.

Ben-Caleb et al (2022) studied budgetary control and organizational survival of manufacturing firms in Nigeria. The study employed ex post facto research design and the population consisted of all manufacturing firms listed on the Nigerian Exchange Group (NGX) from 2015 to 2019 with a sample of 38 companies. The study used organizational survival as the dependent variable measured with age of firm, calculated as present year less year of incorporation while the independent variable budgetary control was measured using change in operating costs (COC), change in profit (CIP), sales growth rate (SGR) of the companies in our study. The study employed secondary data collected from the annual reports of sampled firms and data collected were analysed using descriptive statistics, diagnostic tests, and multiple regression analysis. The results indicated that change in operating costs negatively and insignificantly influence age of firm of the sampled companies; change in operating profit positively and significantly affects age of firm and sales growth positively but insignificantly impact on age of firm. Hence, the study concluded that budgetary control is not a significant determinant of survival of sampled manufacturing companies in Nigeria.

Katana et al (2022) carried out a study on budgetary control and financial performance of listed manufacturing firms in Kenya. The study used correlational research design and the population consisted of all 8 manufacturing firms listed on KSE with census sampling technique as determine the sample size. The study employed secondary data obtained from the annual reports of sampled manufacturing firms and the data collected were analyzing using descriptive statistics, pearson correlation coefficient, random and fixed effects using STATA. The statistical analysis suggested that the Pearson correlation analysis revealed that control ratio positively and significantly influence return on asset (ROA); Hausman test revealed that random effect regression model was effective, since the hausman had a p-value of 0.0924, greater than 0.05 significant level. The random-effect models showed p-value of 0.000, indicating that the model was appropriate. The further revealed that budgetary control contributed 56.1% of ROA, while the 43.9% were contributed by other factors not covered by the model. In addition, the study indicated that liquidity control significantly affects financial performance of listed manufacturing firms in Kenya.

Owolabi et al (2020) investigated budgetary control and financial performance of insurance firms in Nigeria. The study utilized descriptive survey research design and the population comprised of 600 managerial staff from 33 listed insurance companies in Nigeria while a sample size of 230 from 15 insurance firms using convenience sampling. The study used primary data obtained from the distribution of well-structured questionnaires administered to the 230 managerial staff. The study used financial performance as dependent variable while budget monitoring, budget evaluation, budget performance and budget control were used as independent variables to measure budgetary control. The responses from the questionnaire were analysed using Pearson Correlation and regression analysis. The results indicated a positive and significant association between budget

monitoring, budget evaluation, budget performance and budget control on the financial performance of sampled insurance firms in Nigeria.

Olaniyan and Efuntade (2020) conducted research on budget and the budgetary control system on the financial performance of tertiary institutions in Nigeria. The study utilized ex post facto research design and secondary data was used. The study used financial management as the dependent variable with operating cash flow, current ratio, debt equity ratio and asset turnover as measurements while budgeting and budgetary control as independent variable using budget planning, monitoring and control, budget participation, budget evaluation as measures. The study collected secondary data extracted from the Central Bank of Nigeria (CBN) statistical bulletin for the period 2004 to 2019 and the data were analysed using unit root test, cointegration test, and error correction model. The findings showed the presence of co-integration (long-run relationship) among the variables in the model with budget planning, budget evaluation, control and monitoring have significant association with financial performance in Nigeria, while budget participation is not significantly related to financial performance of the tertiary institution in the long run. The study therefore concluded that there is significant correlation between budgetary control system and financial performance of tertiary institution in Nigeria.

Matsoso et al (2021) investigated budgeting and budgetary control in small and medium enterprises in a developing economy. The study employed cross sectional survey research design and the population of the study comprised of 2477 SMEs and simple random sampling was used with Yamene formula to arrive at a sample size of 344. The study used primary data from a well-structured questionnaire after validity and reliability tests. The responses obtained from the questionnaire were analysed using descriptive statistics and the findings suggested that the utilisation of budgeting provides several advantages from a positive insight of the value of budgeting and budgetary controls by key SME operators. The study further revealed that the perception of budgeting mirrors the level of education of SME operators, as educated respondents appreciate the value of implementing robust budgeting and budgetary control systems.

Susuawu (2020) carried out a study of budgets and budgetary control on the performance of small and medium sized enterprises in Ghana. This study utilized descriptive survey research design. A target population of that comprised of three municipalities namely, Ayawaso, Adma, Lannman and a sample size of 200 SMEs. The study used return on assets and profit as measurements for the dependent variable financial performance while budget planning, budget coordination and budgetary control were used as measurements for budget and budgetary control. This study used primary data collected from the questionnaires administered to sampled SMEs using five-point Likert scale. The questionnaire responses were analysed using descriptive statistics and regression analysis. The statistical analysis suggested that budget planning, budget coordination and budgetary control positively and significantly influence the financial performance of SMEs in Ghana.

RESEARCH METHODOLOGY

This study explored the relationship between budgetary control and effective financial management of tertiary institutions (Niger Delta University, University of Africa, Bayelsa Medical University, Federal University of Otuoke, Isaac Jasper Boro College of Education, Sagbama, Bayelsa State Polytechnic Aleibiri, Federal Polytechnic Ekewe) in Bayelsa State of Nigeria. The study employed survey and correlational research designs. The study population comprised of all public higher institutions in Bayelsa State, Nigeria. The respondents were randomly selected from all sampled higher institutions which comprised of three hundred and forty-three (343) staff. The study used secondary and primary sources of data. The secondary sources comprised of textbooks, journals, accounting professional pronouncements and magazines. The primary source of data was obtained from questionnaire, which was carefully designed and administered to a total of 343 respondents across the tertiary institutions with the assistance of simple random sampling technique, therefore, responses of the respondents emanated from a five-point Likert rating scale ranging from strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). The questionnaire was pre-tested using thirty (30) respondents in Isaac Jasper Boro College of Education, Sagbama and a reliability test was done on the data collected using Cronbach Alpha model, to explore the internal consistency of the questionnaire (Appah, 2020). The result of the reliability test shows that the designed questionnaire has a reliability of 0.78. The data obtained from respondents was presented and analyzed using statistical techniques such as univariate, bivariate and multivariate analysis. This study is guided by the functional relationship to test the hypotheses as presented as follows:

$$CAFM = \beta_0 + \beta_1BUPG + \beta_2BUCG + \beta_3BUMG + \beta_4BUPA + \beta_5BUPA + \varepsilon \text{ ----- (1)}$$

$$CAFM = \beta_0 + \beta_1BUPG + \beta_2BUCG + \beta_3BUMG + \beta_4BUPA + \beta_5BUPA + \beta_6MAEX + \beta_7BUPG * MAEX + \beta_8BUCG * MAEX + \beta_9BUMG * MAEX + \beta_{10}BUPA * MAEX + \beta_{11}BUPA * MAEX + \varepsilon \text{ ----- (2)}$$

Where:

BUPG = Budgetary Planning, BUCG = Budgetary Coordinating, BUMG = Budgetary Monitoring
BUPA= Budgetary Participation, BURP= Budgetary Reporting, CAFM= Cash Flow Management
MAEX = Management Experience, $\beta_0 - \beta_5$ = Coefficients, $\beta_6 - \beta_{11}$ = Coefficient of moderator variable, ε = Standard error. The priori expectation: $\beta_1 - \beta_{11} > 0$ and statistical software was applied in data analysis.

RESULTS AND DISCUSSIONS**Table 1: Questionnaire Distribution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Number returned and correctly filled	241	70.3	70.3	70.3
Number returned and not correctly filled	48	14.0	14.0	84.3
Number not returned	54	15.7	15.7	100.0
Total	343	100.0	100.0	

Source: Field Survey (2025) Via SPSS Output

Table 1 depicts a total of Three Hundred and Forty-Three (343) copies of the questionnaire were distributed to the respondents. Out of this number, Two Hundred and Forty-One (241) representing 70.3% response rates were correctly filled and returned while Forty - Eight (48) copies representing 14.0% were returned but not correctly filled. However, Fifty - four (54) representing 15.7% were not returned. The implication is that the analysis of data will be based on Two Hundred and Forty-One (241) copies of the questionnaire representing 70.3% response rates that were returned and correctly filled.

Table 2: Descriptive Statistics of Budget Planning

S/N	Items	N	Min	Max	Mean	Std. D
1	Budget planning aligns with the organizational strategy of cash flow management of tertiary institutions	241	1.00	5.00	3.609	1.293
2	Budget planning assists cash flow management of tertiary institutions	241	1.00	5.00	3.812	1.268
3	Budget planning supports the innovation and growth in the promotion of proper cash flow management	241	1.00	5.00	3.609	1.365
4	Budget planning ensures that tertiary institutions adhere to actual spending	241	1.00	5.00	3.581	1.273
5	Budget planning reduces the cost of running tertiary institutions true proper budgetary control system	241	1.00	5.00	3.601	1.290
Valid N (listwise)		241			3.642	1.298

Source: Field Survey (2025)

The results in table 2 depicts the descriptive statistics of the mean and standard deviation responses on budget planning variable using five questionnaire items that was designed on a five-point Likert

scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation responses on budget planning. Notwithstanding, all the items mean are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.642; Std. D =1.298**) respectively. This implies that budget planning is a significant predictor of cash flow management of tertiary institutions effective financial management in Bayelsa State, Nigeria.

Table 3: Descriptive Statistics of Budget Coordinating

S/N	Items	N	Min	Max	Mean	Std. D
1	Budget coordinating develops a comprehensive plan that aligns with organizational goals and objectives	241	1.00	5.00	3.709	1.315
2	Budget coordinating implements the budget plans and managing financial resources	241	1.00	5.00	3.486	1.303
3	Budget coordinating promotes transparency and accountability in financial management	241	1.00	5.00	3.522	1.300
4	Budget coordinating provide accurate financial information for informed decisions.	241	1.00	5.00	3.717	1.227
5	Budget coordinating enhances financial discipline and responsibility	241	1.00	5.00	3.932	1.210
Valid N (listwise)		241			3.673	1.271

Source: Field Study (2025)

The results in table 3 shows the descriptive statistics of the mean and standard deviation responses on budget coordinating variable using five questionnaire items that was designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation responses on budget coordinating. Notwithstanding, all the items mean are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.673; Std. D =1.271**) respectively. Therefore, this implies that budget coordinating is a significant predictor of cash flow management of tertiary institutions effective financial management in Bayelsa State, Nigeria.

Table 4: Descriptive Statistics of Budget Monitoring

S/N	Items	N	Min	Max	Mean	Std. D
1	Budget monitoring provides the financial tracking of actual expenditures and revenues against budget amounts.	241	1.00	5.00	3.609	1.293
2	Budget monitoring identifies and analyse differences between actual and budgeted amount	241	1.00	5.00	3.812	1.268
3	Budget monitoring addresses budget variances and ensure alignment with financial goals	241	1.00	5.00	3.609	1.365
4	Budget monitoring provides regular financial reports to the organizations	241	1.00	5.00	3.581	1.273
5	Budget monitoring optimizes resource allocation and reduces waste	241	1.00	5.00	3.601	1.290
Valid N (listwise)		241			3.642	1.298

Source: Field Study (2025)

Table 4 represents the descriptive statistics of the mean and standard deviation responses on budget monitoring variable using five questionnaire items that was designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation responses on budget monitoring. Notwithstanding, all the items mean are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.642; Std. D =1.298**) respectively. Consequently, this implies that budget monitoring is a significant predictor of cash flow management of cash flow management of tertiary institutions effective financial management in Bayelsa State, Nigeria.

Table 5: Descriptive Statistics of Budget Participation

S/N	Items	N	Min	Max	Mean	Std. D
1	Budget participation provides stakeholders with a clear understanding of the budgeting process and financial decisions.	241	1.00	5.00	3.709	1.315
2	Budget participation holds decision makers accountable for their financial decision	241	1.00	5.00	3.486	1.303
3	Budget participation incorporates diverse perspectives and expertise into the budget process.	241	1.00	5.00	3.522	1.300
4	Budget participation encourages individuals to participate in the budgeting process and take an active role in their organizations.	241	1.00	5.00	3.717	1.227
5	Budget participation provides the allocating of resources in a way that reflects the needs and priorities of stakeholders	241	1.00	5.00	3.932	1.210
Valid N (listwise)		241			3.732	1.244

Source: Field Study (2025)

Table 5 shows the descriptive statistics of the mean and standard deviation responses on budget participation using five questionnaire items that was designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation responses on budget participation. Although, all the items mean are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.732; Std. D =1.244**) respectively. So, this implies that budget monitoring is a significant predictor of cash flow management of tertiary institutions effective financial management in Bayelsa State, Nigeria.

Table 6: Descriptive Statistics of Budget Reporting

S/N	Items	N	Min	Max	Mean	Std. D
1	Budget reporting provides stakeholders with a clear understanding of an organisation's financial position and performance.	241	1.00	5.00	3.609	1.293
2	Budget reporting holds decision makers accountable for their financial decisions.	241	1.00	5.00	3.812	1.268
3	Budget reporting provides stakeholders with accurate and timely financial information to inform decision making.	241	1.00	5.00	3.609	1.365
4	Budget participation builds trusts with stakeholders by providing regular and detailed financial information	241	1.00	5.00	3.581	1.273
5	Budget reporting identifies areas for improvement and optimizing financial performance	241	1.00	5.00	3.601	1.290
Valid N (listwise)		241			3.642	1.298

Source: Field Study (2025)

The results in table 6 portrayed the descriptive statistics of the mean and standard deviation responses of budget reporting using five questionnaire items that was designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation responses on budget reporting. Notwithstanding, all the items mean are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.642; Std. D =1.298**) respectively. So, this implies that budget reporting is a significant predictor of cash flow management of tertiary institutions effective financial management in Bayelsa State, Nigeria.

Table 7: Descriptive Statistics of Managerial Experience

S/N	Items	N	Min	Max	Mean	Std. D
1	Managers with longer tenure often have a better understanding of budgeting cycles and cash flow patterns that enhances the accuracy of budget forecasts and cash flow projects, leading to more effective control	241	1.00	5.00	3.521	1.400
2	The breath of management experience promotes integrated decision – making, ensuring that budgetary constraints align with real time cash needs.	241	1.00	5.00	3.992	1.226
3	The seniority and complexity of management experience enables strategic adjustments to budgets to maintain healthy cash flow during fluctuations.	241	1.00	5.00	3.884	1.109
4	Management experience in finance or accounting leads to stronger technical skills in cash budgeting and variance analysis which improves the alignment of budgetary control mechanisms with practical cash flow considerations.	241	1.00	5.00	3.880	1.256
5	Strategic-minded managers prioritize long-term cash flow sustainability over short-term budget adherence that balances rigid budget controls with the need for flexible cash management, especially under uncertainty.	241	1.00	5.00	3.761	1.248
Valid N (listwise)		241			3.808	1.248

Source: Field Survey (2025)

The results in Table 7 describe the descriptive statistics of the mean and standard deviation responses of management experience using five questionnaire items that were designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation of responses on budget reporting. Notwithstanding, all the items are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.808; Std. D =1.248**) respectively. So, this implies that management experience is a significant predictor of budgetary control systems on cash flow management of tertiary institutions, effective financial management in Bayelsa State, Nigeria.

Table 8: Descriptive Statistics of Cash Flow Management

S/N	Items	N	Min	Max	Mean	Std. D
1	Cash flow management predicts the future cash inflows and outflows to identify potential cash flow gaps or surpluses.	241	1.00	5.00	3.463	1.400
2	Cash flow management develops strategies to manage cash flows including managing accounts receivable and payables, inventory and capital expenditure.	241	1.00	5.00	3.375	1.226
3	Cash flow management regularly tracks and analyse cash flows to identify trends, anomalies and areas for improvement.	241	1.00	5.00	3.573	1.109
4	Cash flow management identifies opportunities such as reducing accounts receivable days, managing inventory levels and negotiating payment terms with suppliers.	241	1.00	5.00	3.462	1.256
5	Cash flow management provides regular cash flow reports and analysis to stakeholders, including management, investors and lenders.	241	1.00	5.00	3.473	1.248
Valid N (listwise)		241			3.469	1.317

Source: Field Survey (2025)

The results in Table 8 portray the descriptive statistics of the mean and standard deviation responses of cash flow management using five questionnaire items that were designed on a five-point Likert scale. Thus, the questionnaire items labelled above and the mean and standard deviation of the five items were calculated to determine the overall mean and standard deviation of responses on budget reporting. Notwithstanding, all the items are above the cut-off point of 2.5. However, the grand mean and standard deviation responses on the questionnaire items disclosed (**Mean =3.469; Std. D =1.317**) respectively. So, this implies that cash flow management is a significant predictor of financial performance of organisations.

Table 9: Correlation Matrices

	CAFM	BUPG	BUGG	BUMG	BUPA	BURP	MAEX
CAFM Pearson Correlation	1						
Sig. (2-tailed)	0.00						
N	241						
BUPG Pearson Correlation	0.674	1					
Sig. (2-tailed)	.000	.000					
N	241	241					
BUGG Pearson Correlation	0.628	0.523	1				
Sig. (2-tailed)	.000	.000	.000				
N	241	241	241				
BUMG Pearson Correlation	0.618	0.629	0.569	1			
Sig. (2-tailed)	.000	.000	.000	.000			
N	241	241	241	241			
BUPA Pearson Correlation	0.557	0.635	0.624	0.694	1		
Sig. (2-tailed)	.000	.000	.000	.000	.000		
N	241	241	241	241	241		
BURP Pearson Correlation	0.735	0.588	0.695	0.622	0.506	1	
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
N	241	241	241	241	241	241	
MAEX Pearson Correlation	0.786	0.525	0.611	0.643	0.604	0.627	1
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
N	241	241	241	241	241	241	241

Source: *Computed by Author Via SPSS (2025)*

The bivariate analysis was carried out using Pearson's Product-Moment Correlation Coefficient (PPMC), showing the relationship between budgetary control system (budgetary planning, budgetary coordinating, budgetary monitoring, budgetary participation and budgetary reporting), financial management (cash flow management) and firm management (managerial experience). Table 9 shows a strong and positive ($r = 0.674$, $P = 0.00$) relationship between budgetary planning and cash flow management of tertiary institutions in Bayelsa State, Nigeria; a strong and positive ($r = 0.628$, $P = 0.00$) relationship between budgetary coordinating and cash flow management of tertiary institutions in Bayelsa State, Nigeria; a strong and positive ($r = 0.618$, $P = 0.00$) relationship between budgetary coordinating and cash flow management of tertiary institutions in Bayelsa State, Nigeria; a moderate and positive ($r = 0.557$, $P = 0.00$) relationship between budgetary participation and cash flow management of tertiary institutions in Bayelsa State, Nigeria; a strong and positive ($r = 0.735$, $P = 0.00$) relationship between budgetary coordinating and cash flow management of tertiary institutions in Bayelsa State, Nigeria; and a strong and positive ($r = 0.786$, $P = 0.00$) relationship between management experience and cash flow management of tertiary institutions in Bayelsa State, Nigeria.

Table 10: Multiple Regression Analysis Model One

Dependent Variable: CAFM

Method: Least Squares

Date: 07/20/25 Time: 16:48

Sample(adjusted): 1 241

Included observations: 241 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.275444	1.256856	3.401698	0.0188
BUPG	1.285935	0.495662	2.594379	0.0335
BUCG	0.749495	0.302735	2.475761	0.0376
BUMG	0.616547	0.302573	2.037680	0.0463
BUPA	0.853341	0.421846	2.022873	0.0385
BURP	1.234756	0.612637	2.015477	0.0421
R-squared	0.584537	Mean dependent var		12.99346
Adjusted R-squared	0.463324	S.D. dependent var		3.098167
S.E. of regression	2.888766	Akaike info criterion		4.997962
Sum squared resid	1226.711	Schwarz criterion		5.116803
Log likelihood	-376.3441	F-statistic		6.382415
Durbin-Watson stat	2.848014	Prob(F-statistic)		0.000207

Source: e-view output

Table 10 shows the multiple regression analysis for budgetary Control systems and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The result suggested a positive and significant ($t = 2.594379$, $p = 0.0335 < 0.05$) relationship between budgetary planning (BUPG) and cash flow management (CAFM) of tertiary institutions in Bayelsa State, Nigeria. The finding also showed a positive and significant ($t = 2.475762$, $p \text{ value } 0.0376 < 0.05$) relationship between budgetary coordinating (BUCG) and cash flow management (CAFM) of tertiary institutions in Bayelsa State, Nigeria. The result also revealed a positive and significant ($t = 2.037680$, $p = 0.0463 < 0.05$) relationship between budgetary monitoring (BUMG) and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The findings also indicated a positive and significant ($t = 2.022873$, $p = 0.0385 < 0.05$) relationship between budgetary participation and cash flow management of tertiary institutions in Bayelsa State, Nigeria. and a positive and significant ($t = 2.015477$, $p = 0.0421 < 0.05$) relationship between budgetary reporting (BURP) and cash flow management and cash flow management of tertiary institutions in Bayelsa State, Nigeria. Therefore, budgetary control systems (BUPG, BUCG, BUMG, BUPA and BURP) have a significant and positive effects on cash flow management of tertiary institutions in Bayelsa State, Nigeria. The R^2 (coefficient of determination) of 0.584537 and adjusted R^2 of 0.563324 shows that the variables combined determines about 58% and 46% of cash flow management of tertiary institutions in Bayelsa State, Nigeria. The F-statistics and its probability shows that the regression equation is well formulated explaining that the relationship between the variables combined affects cash flow management (CAFM) of tertiary institutions in Bayelsa State, Nigeria. (F-stat = 6.382415; F-pro. = 0.000207).

Table 11: Multiple Regression Analysis Model Two

Dependent Variable: CAFM

Method: Least Squares

Date: 07/22/25 Time: 16:28

Sample(adjusted): 1 241

Included observations: 241 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.275444	2.256856	1.451330	0.1488
BUPG	0.285935	0.095662	2.989017	0.0237
BUCG	0.249495	0.106627	2.339885	0.0365
BUMG	0.216547	0.102573	2.111150	0.0238
BUPA	0.275632	0.123481	2.384517	0.0476
BURP	0.273341	0.123184	2.218965	0.0473
MAEX	0.284753	0.148523	2.847532	0.0134
BUPG*MAEX	0.287452	0.134273	2.182735	0.0182
BUCG*MAEX	0.382834	0.182347	2.394851	0.0427
BUMG*MAEX	0.238474	0.283415	2.398345	0.0374
BUPA*MAEX	0.273341	0.123481	2.123481	0.0476
BURP*MAEX	0.234756	0.112637	2.126453	0.0486
R-squared	0.784752	Mean dependent var		12.99346
Adjusted R-squared	0.658733	S.D. dependent var		3.098167
S.E. of regression	2.888766	Akaike info criterion		4.997962
Sum squared resid	1226.711	Schwarz criterion		5.116803
Log likelihood	-376.3441	F-statistic		5.567008
Durbin-Watson stat	2.718372	Prob(F-statistic)		0.000100

Source: e-view output

Table 11 shows the multiple regression analysis for budgetary Control systems and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The result suggested a positive and significant ($t = 2.989017$, $p = 0.0237 < 0.05$) relationship between budgetary planning (BUPG) and cash flow management (CAFM) of tertiary institutions in Bayelsa State, Nigeria. The finding also showed a positive and significant ($t = 2.339885$, $p \text{ value } 0.0365 < 0.05$) relationship between budgetary coordinating (BUCG) and cash flow management (CAFM) of tertiary institutions in Bayelsa State, Nigeria. The result also revealed a positive and significant ($t = 2.111150$, $p = 0.0238 < 0.05$) relationship between budgetary monitoring (BUMG) and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The findings also indicated a positive and significant ($t = 2.384517$, $p = 0.0473 < 0.05$) relationship between budgetary participation and cash flow management of tertiary institutions in Bayelsa State, Nigeria. The result also revealed a positive and significant ($t = 2.218965$, $p = 0.0473 < 0.05$) relationship between budgetary reporting (BURP) and cash flow management and cash flow management of tertiary institutions in Bayelsa State, Nigeria. Furthermore, the result suggested a positive and significant ($t = 2.847532$, $p = 0.0134 < 0.05$) relationship between management experience and cash flow management and cash flow management of tertiary institutions in Bayelsa State, Nigeria. Therefore, budgetary control systems and management experience (BUPG, BUCG, BUMG, BUPA, BURP and MAEX) have a

significant and positive effects on cash flow management of tertiary institutions in Bayelsa State, Nigeria. The moderating effects of managerial experience on budgetary control variables also showed a positive and significant association with cash flow management of tertiary institutions in Bayelsa State, Nigeria. The R^2 (coefficient of determination) of 0.784752 and adjusted R^2 of 0.658733 shows that management experience moderates the variables combined determines about 78% and 66% of cash flow management of tertiary institutions in Bayelsa State, Nigeria. The F-statistics and its probability shows that the regression equation is well formulated explaining that the relationship between the variables combined affects cash flow management (CAF) of tertiary institutions in Bayelsa State, Nigeria. (F-stat = 5.567008; F-pro. = 0.000100).

DISCUSSION OF FINDINGS

The study makes important contributions to the current body of literature on managerial experience, budgetary system and effective financial management. First, the result established that budgetary planning had a significant positive effect on cash flow management. This result aligned with the prior findings of Ariyo-Edu and Woli-Jomh (2024), Halwiidi and Mwanzi (2022), Isibor et al (2022), Alade et al. (2020), and Olaniyan and Efuntade (2020) who underscore the vital role of the budgeting planning on financial performance of public sector entities. However, the findings negate the study of Lyndon and Joseph (2019) study, stating that there is no significant connection between budgeting and performance in Bayelsa State. Hence, the empirical evidence of the present study supports the statement and further suggests that an increase in budgetary planning would lead to an increase in cash flow management of tertiary institutions' financial management structure in Bayelsa State. The second result of this paper is that budgetary coordination had a positive and significant effect on cash flow management. The finding is consistent with the study carried out by Susuawu (2020) in Ghana that budget coordination had a positive and significant impact on the performance of small and medium enterprises. Similarly, the findings agree with the study carried out by Ariyo-Edu and Woli-Jomh (2024). This result suggests that budgetary coordination would lead to an increase in cash flow management. The third finding of this paper is that budget monitoring had a positive and significant impact on cash flow management. The finding resonates with Isibor et al (2022), Owolabi et al (2020) that budget monitoring influences the financial performance of organisations. However, the findings of the study disagree with Lyndon and Joseph (2019) study, stating that there is no significant connection between budgeting and performance in Bayelsa State. The fourth finding of this paper is that budget participation had a significantly positive effect on cash flow management. Consequently, the empirical evidence of the present study supports the statement and further suggests that an increase in budget participation improves cash flow management. The fifth finding reveals that budget reporting had a positive and significant impact on cash flow management. Hence, the empirical evidence of the present study supports the statement and further suggests that an increase in budgetary reporting would lead to an increase in cash flow management of tertiary institutions' financial management structure in Bayelsa State. The sixth contribution of this study is the moderating role of management experience on the relationship between budgetary control and cash flow management of tertiary institutions' financial management structure in Bayelsa State. The

findings suggest that managerial experience had a positive moderating effect on the relationship between budgetary control and cash flow management. Therefore, the empirical evidence of the present study supports the statement and further suggests that an increase in managerial experience would lead to an increase in budgetary control systems and cash flow management of tertiary institutions' financial management structure in Bayelsa State.

CONCLUSION, POLICY IMPLICATIONS AND FURTHER RESEARCH

This study investigated the moderating role of managerial experience on budgetary control systems and cash flow management of tertiary institutions' effective financial management structure in Bayelsa State. The paper employed univariate, bivariate and multivariate statistics to find out if the change in managerial experience, budgetary planning, budgetary coordination, budgetary monitoring, budgetary participation and reporting affects the cash flow management of tertiary institutions' financial management structure in Bayelsa State. The result from our analysis indicates a strong and positive association between managerial experience, budgetary planning, budgetary coordination, budgetary monitoring, budgetary participation, and reporting affects the cash flow management of tertiary institutions' financial management structure in Bayelsa State. This demonstrates that an effective budgetary control system would improve cash flow management in tertiary institutions in Bayelsa State. The results also demonstrated that managerial experience had a positive and significant moderating effect on the association between budgetary control and effective cash flow management of tertiary institutions in Bayelsa State, Nigeria. Based on the findings, the paper concludes that budgetary control systems are a significant determinant of cash flow management of tertiary institutions in Bayelsa State. Also, managerial experiences moderate significantly the association between budgetary control systems and cash flow management of tertiary institutions in Bayelsa State.

The policy implications of the positive and significant moderating effects of managerial experience on the relationship between budgetary control and cash flow management in tertiary institution include the following: tertiary institutions should prioritise managerial experience in the recruitment, promotion, and retention of financial and administrative staff since experienced staff possess deeper understanding and intuition regarding budgeting systems, leading to better cash flow monitoring and control. Institutional policies should mandate continuous professional development and training in budgeting and financial management because managerial experience, when enhanced by ongoing training, strengthens the ability to interpret and act on budgetary data, improved cash flow outcomes. Experienced staff should be granted more autonomy in budgetary control and expenditure planning since decentralization allows experienced staff to apply contextual judgment, optimizing resource allocation and cash management. Budgetary policies should be flexible and tailored to the skill level and experience of staff because rigid systems may constrain experienced staff from implementing effective strategies for cash flow stabilization. Performance appraisal systems should include the effects of managerial experience on financial outcomes such as budget adherence and liquidity management since recognizing the value added by experience reinforces effective financial stewardship. Managerial experience should be considered when aligning budgets with long term institutional goals because experienced staff

contribute to strategic alignment of budgetary control with institutional mission, improving fiscal discipline.

The study offered significant and insightful results, but with limitations. The study applied self – reports due to the difficulty in obtaining record – based data on budgetary control and cash flow management. Therefore, further studies can be done on longitudinal study of managerial learning and cash flow trends. Further studies can be explored on the interaction between managerial competence and budgetary control rigors, digital budgeting tools in mediating managerial experience, comparative study across educational and non-educational sectors, gender and demographic dimensions of managerial experience.

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REFERENCES

- Alade, M. E., Owabumoye, M. O., & Olowookere, J. K. (2020). Budgetary control mechanism and financial accountability in Ondo State public sector. *Accounting and Review*, 4(2), 134-147.
- Appah, E. (2017). *Cost Accounting: Theory and Application*, Convince Concept.
- Appah, E. (2022). *Financial Management: Theory, Strategy and Practice*. Ezevin Minting Printing Enterprises
- Appah, E. (2023). *Management Accounting: A performance measurement approach*. Ezevin Minting Printing Enterprises.
- Appah, E. (2022). corporate governance and financial performance of listed consumer goods manufacturing firms in Nigeria. Unpublished PhD Accounting Thesis, Ignatius Ajuru University of Education, Port Harcourt, Rivers State, Nigeria.
- Appah, E. & Zibaghafa, S. (2023). Accounting standard adoption and financial reporting quality of public sector entities in Rivers and Bayelsa States. *Journal of Accounting and Financial Management*, 9(3), 1 – 30.
- Appah, E., Awuji, C. E., & Anuogwo, K. N. (2021). Cash flow accounting and corporate financial performance of listed consumer goods companies in Nigeria. *OSR Journal of Business and Management (IOSR JBM)*, 23(3), 18-29.
- Ariyo-Edu, A. A., & Woli-Jomh, I. A. (2024). Budgeting and budgetary control and public sector performance: A study of public sector in Kwara State, Nigeria. *FUOYE Journal of Finance and Contemporary Issues*, 6(1), 15-30.
- Ben-Caleb, E., Madugba, J. U. & Innocent, F. I. (2022). Budgetary control and organizational survival: Evidence from manufacturing firms in Nigeria. *Universal Journal of Financial Economics*, 1(1), 1 – 13.

- Dare, C. T., Akinola, A. O., & Wahab, A. O. (2022). Government budgets and economic development in Nigeria: An empirical investigation. *International Journal of Social Sciences and Management Research*, 8(5), 123-135.
- Dawit, M. T. (2022). Democratic Vs destructive leadership: The comparative analysis of foreign policy successes and failures, President Trump Vs. PM Dr, Abiy Ahmed. *American Journal of Arts and Educational Administration Research*, 1(1), 1-12. <https://doi.org/10.58314/101918>
- Drury, C. (2021), *Management and Cost Accounting, 11th ed.*, Cengage Learning, Hampshire.
- Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., Lahiri, D., & Lavie, C. J. (2020). Psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 779–788. <https://doi.org/10.1016/j.dsx.2020.05.035>
- Egbunike, P.A. & Unamma, A. N. (2017). Budgeting, budgetary control and performance evaluation: Evidence from hospitality firms in Nigeria. *Studies and Scientific Researchers Economic Education*, 26, 23 – 31.
- Egwu, E. M., Orugun, F. I. & Adelakun, A. (2021). Exploration of cash flow management for enterprise's business performance. *Asian Journal of Economics, Business and Accounting*, 21(10), 97 – 105.
- Etale, L. & Idumesaro, B. (2021). Assessing the relationship between budgetary control and performance: A case study of Bayelsa State, Nigeria. *Journal of Public Administration*, 30(2), 88-104.
- Eunice, R. C., & Iwedi, M. (2024). Public sector financial management reforms and government expenditure in Nigeria. *Finance and Accounting Research Journal*, 6(4), 567-57
- Harney, B. (2023). *Contingency theory*. In S. Johnstone, & A. Wilkinson (Eds.), *Encyclopedia of Human Resource Management*: 470: Edward Elgar.
- Harney, B. & Collings, D. G. (2021). Navigating the shifting landscapes of HRM, *Human Resource Management Review*, 31(4), 1-9.
- Halwiidi, H. & Mwanzi, B. G. (2022). The effect of budgetary control on financial performance: A case study of a mining company. *European Modern Studies*, 6(3), 502 – 512.
- Isaac, A., Ojeme, S. S. & Olusegun, A. A. (2024). Budgetary control and public sector financial management in Nigeria. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(4), 603 – 608.
- Isibor, A., Adegboye, F., Achugamowu, U., Udemé, M. & Ezech, U.C. (2022). Budgetary control techniques and sustainable performance of selected health sector non-governmental organisations in Nigeria. *Journal of Southwest Jiaotong University, China*, 57(6), 583 – 600.
- Katana, H. W., Atieno, M. & Wanyana, S. M. (2022). Budgetary control and financial performance of listed manufacturing firms in Kenya: Application of liquidity control. *International Journal of Advanced Research Publications*, 5(10), 33 – 41.
- Laghari F, Ahmed F, Lo 'pez Garcí 'a MdIN (2023) Cash flow management and its effect on firm performance: Empirical evidence on non financial firms of China. *PLoS ONE* 18(6): e0287135. <https://doi.org/10.1371/journal.pone.0287135>.

- Mamadou, S. (2019). The managerial experience: A new challenge for firm. *International Journal of Management Science and Business Administration*, 5(2), 7 – 12.
- Mark, T. & Erude, S. U. (2023). Contingency theory: An assessment. *American Journal of Research in Business and Social Sciences*, 3(2), 1 – 12.
- Matsoso, M. L., Nyathi, M. & Nakkpodia, F. A. (2021). An assessment of budgeting and budgetary controls among small and medium –sized enterprises: Evidence from a developing economy. *Journal of Accounting in Emerging Economy*, DOI 10.1108/JAEE-04-2020-008.
- Mehryar, S., & Surminski, S. (2021). National laws for enhancing flood resilience in the context of climate change: Potential shortcomings. *Climate*, 133-151.
- Mihajlović, M., Tadin, D. & Gordić, B. (2020). The role of financial management in the company, *Tehnika*, 75(4), 498–503, doi: 10.5937/tehnika2004498M.
- Munip, A., Ishak, R. P., Butarbutar, M., Sisran, A. & Syahputra, M. H. I. (2024). The impact of managerial experience, continuing education and work-life balance on innovation and growth of start-ups in Indonesia. *West Science Journal Economics and Entrepreneur*, 2(3), 269 – 282.
- Ogiriki, O., Atagboro, E. & ogoun, S. (2020). Impact of cash flow on the performance of consumer goods companies in Nigeria. *Niger Delta Journal of Management Sciences*, 1(4), 1–21.
- Olaniyan, N.O. & Efuntade, L.O. (2020). Budget and the budgetary control system in tertiary institution's financial performance in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 281-302.
- Omalika, E., Mordi, K. & Okpala, N. E. (2023). Cash flow management and firm performance: moderating effect of corporate governance mechanism in the era of disruption in emerging economy. *South Asian Journal of Social Studies and Economics*, 20(4), 1 – 13.
- Owolabi, S. A., Kwarbai, J.D., & Olasehinde, O. J. (2020). Budgetary control and financial performance of insurance companies in Nigeria. *The International Journal of Business and Management*, 8(7), 312 – 317.
- Romenska, K., Chentsov, V., Rozhko, O., & Uspalenko, V. (2023). *Budget planning with the development of the budget process in Ukraine*. University of Ukraine Printing Press.
- Ross, T. K. (2020). Budgeting for results. *Health Manager*, 39(1), 24-34.
- Shala, B., Prebreza, A. and Ramosaj, B. (2021) The contingency theory of management as a factor of acknowledging the leaders-managers of our time study case: The practice of the contingency theory in the company Avrios. *Open Access Library Journal*, 8, e7850. <https://doi.org/10.4236/oalib.1107850>.
- Shenkar, O. & Ellis, S. (2021). The rise and fall of structural contingency theory: a theory's 'autopsy'. *Journal of Management Studies*, DOI: <https://doi.org/10.1111/joms.12772>.
- Sitinjak, C., Johanna, A., Avinash, B. & Bevoor, A. (2023). Financial management: A system of relations for optimizing enterprise finances – a review. *Journal of Markout Finance*, 1(3), 160 – 170.
- Sukenti, S. (2023). Financial Management Concepts: A review. *Journal of Contemporary Administration and Management*, 1(1), 13 – 16.

- Susuawu, D. (2020). The application of budgets and budgetary control on the performance of small and medium-sized enterprises in Ghana. *Journal of Accounting*, 8(5), 1 – 18.
- Weik, E. (2019). Understanding institutional endurance: The role of dynamic form, harmony, and rhythm in institutions. *Academy of Management Review*, 44: 321–335.
- Wu, W., Song, J., Lu, L. & H. Guo, H. (2024). Is managerial ability a catalyst for driving digital transformation in enterprises? An empirical analysis from internal and external pressure perspectives, *PLoS One*, 19(2), e0293454.