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Budgetary Control Tools and Operational Performance of Brewing Firms in South-South Nigeria

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Abstract

Budgetary control remains a vital management tool for enhancing efficiency and aligning organizational activities with strategic goals. However, breweries in South-South Nigeria continue to face operational challenges such as rising input costs, high tax burdens, and fluctuating consumer demand, often worsened by weak application of budgetary control tools. This study examined the effect of budgetary control tools budget flexibility, performance evaluation, variance analysis, participatory budgeting, and budgeting procedure compliance on the operational performance of selected breweries in South-South Nigeria, with operational performance proxied by cost efficiency. The study adopted a survey research design and used a census sampling technique to cover all 103 managerial staff directly involved in budgeting across four brewing firms. Primary data were collected using a structured questionnaire, validated by experts, and tested for reliability

with a Cronbach's Alpha of 0.884. Data were analyzed using Ordinary Least Squares (OLS) regression at a 5% significance level. Findings revealed that budget flexibility ($\beta = 0.496$, $p = 0.000$), performance evaluation ($\beta = 0.699$, $p = 0.000$), and participatory budgeting ($\beta = 0.676$, $p = 0.000$) had significant positive effects on cost efficiency. Variance analysis ($\beta = 0.121$, $p = 0.112$) and budgeting procedure compliance ($\beta = 0.261$, $p = 0.183$) showed positive but insignificant effects. The study concluded that budgetary control tools significantly influence operational performance, with flexible, participatory, and evaluative approaches proving most effective. It recommends prioritizing flexible budgeting, instituting regular performance evaluations, strengthening participatory budgeting, improving variance analysis timeliness, and complementing procedure compliance with robust monitoring systems.

Keywords: Budgetary Control, Budgetary Control Tools, Operational Performance, Cost Efficiency

1. Introduction

1.1 Background to the Study

It is now a cliché that the business environment in Nigeria today is characterized by a high level of uncertainty and risk. Due to this, managers and stakeholders need to be equipped to compete effectively and strategically in the face of these rapidly changing or dynamic conditions. To ensure survival amidst the challenges and unpredictability, particularly in the manufacturing sector, the said stakeholders must adopt proven and reliable management techniques that enable them to anticipate significant changes and chart a clear direction for the future, as cited in (Nwanyanwu & Ogbonnaya, 2018). This is where budgeting and budgetary control play a vital role. In today's business world, organizations have embraced various processes and tools to support planning and control functions, with budgeting standing out as one of the most widely used and essential (Al-Mahroqi & Matriano, 2021). Al-Mahroqi and Matriano (2021) also explained that budgeting is all about setting clear financial targets, keeping track of actual performance, and comparing results with those initial goals. Through that idea, they highlighted its importance as a vital tool for financial planning that could businesses to project how they'll perform financially under certain strategies or plans. As Churchill (2001) pointed out, budgetary control systems have become not just widespread, but essential in helping organizations make better use of their resources, improve efficiency, and stay financially sustainable over the long term.

As cited in Schubert and Kirsten (2021), many organizations rely on budgetary control as a key part of their internal control systems, using it as a strategic tool to allocate resources effectively and efficiently. Kiringai (2002) emphasized that budgetary control supports future planning by helping managers implement plans and track whether actual activities align with intended

objectives, and when it's executed properly, it serves as a critical backbone for enforcing budget discipline. Simidi *et al.* (2021) further explained that many firms adopt a broader approach to budgetary control, treating the entire budgeting process, from preparation and evaluation to execution as a continuous control system. This system in essence, includes setting performance standards, rewarding or correcting based on outcomes, and monitoring execution closely. We still have narrow budgetary control on the other hand, which focuses more on comparing actual results with the budget, identifying variances, and taking corrective actions as needed to keep performance on track (Umo, 2015).

To further cement the ideas in the previous paragraph, it was cited in Etale and Idumesaro (2019) that many firms view budgetary control as a key component of internal corporate governance. In their assertion, budgetary control offers is a solid yardstick for managing resources efficiently and making informed strategic decisions. They explained that budgetary control empowers management to develop strategic plans, carry them out effectively, and continually monitor operations to ensure activities align with organizational goals. Kiringai (2002) referred to this process as the entire budget cycle, and said to span from the initial preparation and real-time monitoring to the post-implementation review. It also includes analyzing variances and integrating mechanisms such as performance evaluation, rewards, and disciplinary actions. According to Kiringai (2002), proper execution of budgetary control measures plays a very relevant role in ensuring that the organization's budget is successfully implemented.

In Igbinosun and Ohiokha (2012), budgetary control was described as an essential management tool that drives organizational efficiency and enhances economic performance in multiple ways. One of its core roles, they cited, is to serve as both a financial planning guide and a mechanism for keeping departmental spending in check. In a similar parlance, Fisher *et al.* (2000) pointed out that budgetary control equips managers with the ability to critically assess current operations, enabling them to make informed decisions about whether to expand, reduce, discontinue, or diversify various activities. Steven (2002) further emphasized that budgeting and control reflect a deliberate decision-making process that sets organizational objectives and outlines how those objectives will be pursued through strategic policies and planning. In this study, budgetary control was explored through five key proxies: budget flexibility, performance evaluation, variance analysis, budgetary compliance and use of technology in budgeting. According to Oyadomari *et al.* (2018), budget flexibility refers to an organization's capacity to adjust budget estimates in response to changing business conditions. Bhimani *et al.* (2018) supported this view by identifying techniques such as budget revisions, reforecasting, and rolling forecasts as practical tools for flexible budgeting. These methods, as reemphasized by Mucci *et al.* (2023), facilitate timely and responsive adjustments that align with ongoing performance evaluations which takes us to the next variable of interest.

Second variable of interest was performance evaluation and was viewed as a key instrument for measuring how effectively an organization achieves its objectives. Mucci *et al.* (2023) as already mentioned in the previous paragraph, stated that to evaluate performance properly, managers must first determine what the organization intends to accomplish.

This is simply goal-setting. According to Egbunike (2017), the evaluation process typically involves two components which are performance data and benchmarks. Here, benchmarks are based on similar organizations, industry standards or expectations, something from the legitimacy theory. From these, it is safe to say that the core objective of performance evaluation is to assess how efficiently an organization utilizes its available resources. In addition to evaluation, variance analysis plays a big part in budgetary control and it was the third variable of interest. Oluwayemisi *et al.* (2024) defined it as a foundational tool in management accounting that helps compare planned financial outcomes with actual results, thereby identifying areas needing attention. Akinola and Efuntade (2021) stressed that the ultimate goal of variance analysis is basically to facilitate proactive decision-making by pointing light at specific deviations from expected or set performance. Bernard *et al.* (2020) talked about forms of variances that might be: controllable and uncontrollable, and also mentioned that distinguishing between controllable and uncontrollable variances is essential, as this distinction enables management to assign responsibility and take corrective actions. They also emphasize that meaningful changes, corrections, adjustments and improvements can only be realized when variances are controllable and could be hard when the variances are not controllable.

Budgeting procedure compliance was another variable considered. It explains how well an organization follows established steps in preparing, reviewing, and approving its budget. It goes beyond just writing down figures, it's about aligning planning with organizational goals and ensuring accountability and transparency (Bashuna, 2013; Mohamed *et al.*, 2015). As cited in Abdurahmat (2003), when these procedures are properly followed, decision-making improves, underperformance becomes easier to identify, and overall effectiveness tends to increase. The next variable was participatory budgeting. Participatory budgeting simply put, is a process where those directly involved in implementing the budget are also part of its preparation and planning (Hansen & Mowen, 2013). It is cited to be an inclusive approach which does not only have the capacity to help create a sense of ownership and commitment but also improves the flow of information between different levels of management both input and output (Anthony *et al.*, 2005; Dharmanegara *et al.*, 2016). These were properly cited in the literature review section. The idea is that when more people are part of the process, the chances of information being withheld or misunderstood are reduced, which can lead to better motivation, lower conflict, and stronger performance (Pakpahan & Augustine, 2019).

Having established the importance of budgetary control, it's equally important to acknowledge that all business activities ultimately aim at one key outcome: performance. In corporate discussions, performance is a broad and multifaceted concept that reflects how well an organization achieves its goals, meets set objectives, and aligns its operations with its overall mission (Penman & Penman, 2007). Certainly, a central aspect of this is operational performance, which focuses on how efficiently a company utilizes its resources efficiently. Although there are several ways to assess operational performance, this study focuses on cost efficiency as the key indicator. Cost efficiency is a very relevant part in business decision-making. This is so because it revolves around minimizing operational or

production costs without sacrificing quality (Bellal, 2017). According to Yuksel *et al.* (2018), evaluating cost efficiency involves analyzing the balance between the value of output and the cost of input. Along the same lines, Nkem and Akujinma (2017) observed that when firms operate more cost-effectively, they enhance their capacity to generate higher returns and provide greater value to customers.

1.2 Statement of the Problem

In the current business environment, consumer goods firms, including breweries in South-South Nigeria face increasing pressure to stay financially afloat while dealing with rising input costs, heavy tax obligations, and unpredictable shifts in consumer demand. Now, even though it has been long established that budgetary control tools are meant to support financial decision-making and help keep spending aligned with strategic goals, many companies still struggle to apply these tools effectively. It's not far-fetched that weak budgeting practices, limited or rare use of variance analysis, absence of flexible budgeting systems, poor budgetary compliance as well as the lack of full participation in the budgeting processes often result in misallocated resources, budget deficits, and poor financial outcomes. Stated differently, while some breweries may adopt traditional autocratic budgetary system, their ability to adapt those budgets to real-time changes in the current landscape remains limited, leaving room for inefficiencies and budgetary performance shortfalls.

Although observed past studies have explored the connection between budgeting and organizational outcomes, very few have looked into how specific budgetary control tools such as budget flexibility, performance evaluation, variance analysis, budgeting procedure compliance and participatory budgeting to shape the cost efficiency of breweries, especially in South-South Nigeria. These breweries operate in a country as well as a zone known for rising production costs, and intense competition, which makes resource management a big concern. Despite this, there is no clear or precise research into how these tools actually influence cost efficiency. The truth is that many firms may be budgeting in theory but not in practice or reality. In reality, previous researches are yet to use the five variables (budget flexibility, performance evaluation, variance analysis, budgeting procedure compliance and participatory budgeting) collectively to demonstrate their effects on operational performance.

1.3 Objectives of the Study

The main objective of this study was to examine the effect of budgetary control tools on operational performance of brewing firms. The specific objectives were;

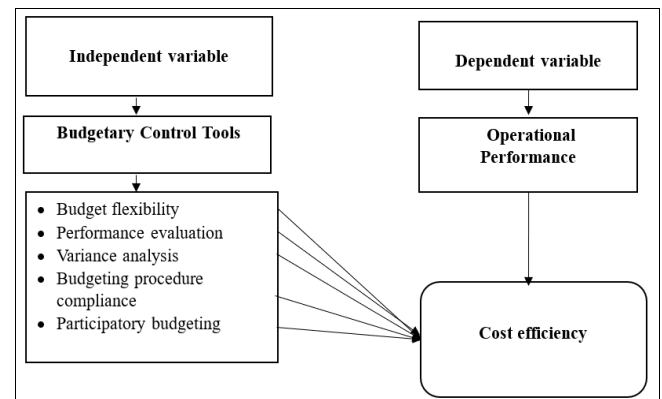
1. to evaluate the effect of budget flexibility on cost efficiency of brewing firms.
2. to assess the effect of performance evaluation on cost efficiency of brewing firms.
3. to examine the effect of variance analysis on cost efficiency of brewing firms.
4. to investigate the effect of participatory budgeting on cost efficiency of brewing firms.
5. to find out the effect of budgeting procedure compliance on cost efficiency of brewing firms.

2. Review of Related Literature

This session presented a comprehensive review of the literature relevant to this study. It includes the conceptual framework, theoretical framework, empirical review, and a summary of empirical review as well as research gaps. The chapter aimed to provide a detailed explanation of the concepts of budgetary control tools and operational performance, specifically within the context of selected breweries in South-South Nigeria.

2.1 Conceptual framework

In this section, a review of extant literature on the subject matter was carried out covering conceptual issues, theoretical framework, and review of empirical studies.



Source: Researcher's Conceptualization (2025)

Fig 2.1: Conceptual framework of independent and dependent variables

2.1.1 Budgetary control tools

According to Igbinosun and Ohiokha (2012), budget represents their shared vision, expressed in monetary terms, for how limited resources should be allocated to meet the organization's goals, all while taking into account the input of others and the realities of the external environment. In other words, a budget is a financial plan prepared and approved ahead of time, typically outlining the income expected, expenses to be incurred, and capital to be used over a specific period (CIMA, 2005). Drury (2008) emphasized that budgeting helps coordinate the many activities of a business by providing clear action plans for future periods. In the same vein, Pandey (2003) viewed the budget as a short-term financial guide that supports managers in achieving the firm's objectives. Well, a budget is not necessarily short term as stated, it could also be long term in my opinion. Evans *et al.* (2001) added that a budget can be seen as a structured financial statement that covers key elements such as revenue, expenses, assets, liabilities, and cash flow within a set timeframe.

Budgeting is a process of turning an institution's plans into a clear and organized financial outline; one that lists expected income and spending for a specific period (Jensen, 2003). It helps set targets for both management and daily operations, serving as a forward-looking guide that outlines what an organization aims to achieve. More than just numbers, budgets are practical tools used to plan, communicate expectations, authorize actions, motivate staff, and track progress. This view is in line with that of the goal setting

theory by (Locke & Latham, 1990). They help ensure that everyone is working toward the same goals. As Halwiindi and Mwanza (2022) explained, budgetary control involves planning how resources should be distributed across different parts of the organization to meet its overall objectives. It also includes monitoring actual performance against the plan and making necessary adjustments whenever things start to go off track or adverse.

There are many views on the concept of budgetary control. According to Kinyua (2015), budgetary control involves creating a spending plan and regularly checking actual expenses against that plan to see if any changes are needed to stay on track of predetermined patterns. This process is basically for the purpose of managing costs and achieving financial goals. Supporting this view, Rankim *et al.* (2003) explained that control is all about ensuring plans are being followed and taking corrective action whenever things start to drift off track which has actually been like the view of other scholars cited earlier. They also mentioned that without proper control systems, an organization becomes vulnerable to both internal and external disruptions that can weaken its effectiveness. Whether in the public or private sector, or even at the individual level, like a family trying to stick to a monthly budget, budgetary control is widely used to manage spending and promote financial discipline; as cited in (Dunk, 2009).

Nyongesa *et al.* (2016) made emphasis on elements of budgetary control; known as budgetary control techniques. According to Nyongesa *et al.* (2016), budgetary control techniques are essential tools used by organizations to plan, monitor, and manage their financial resources effectively. Nyongesa *et al.* (2016) added that these techniques include variance analysis, which compares actual performance against budgeted figures to identify discrepancies; zero-based budgeting, where every expense must be justified from scratch; and flexible budgeting, which adjusts according to changes in activity levels. Other methods mentioned included performance budgeting, which link financial inputs to outcomes, and rolling budgets, which keep financial plans current by continuously updating them. Nyongesa *et al.* (2016) added that the goal of all these is efficiency and achievement of overall business objective (profit maximization).

2.1.2 Components of budgetary control tools

Budgetary control tools are specific techniques employed by organizations to implement effective budgeting processes and ensure that financial activities align with strategic objectives. These tools serve as mechanisms for planning, monitoring, and evaluating both financial and operational performance. In the context of manufacturing and production-oriented firms like breweries, budgetary control tools are essential for ensuring cost efficiency, resource optimization, and improved operational outcomes. This section discussed the following key components of the budgetary control tools.

2.1.2.1 Budget flexibility

Budget flexibility refers to an organization's ability to modify its budget in response to shifts in business conditions or activity levels (Oyadomari *et al.*, 2018). This flexibility helps organizations stay agile and prepared for unexpected changes. In fact, simply put, budget flexibility involves the use of flexible budgets. As defined by CIMA (2000), a flexible budget is one which takes into account the way fixed and variable costs behave when output, revenue, or

other factors, like employee numbers, sales, inventory and so on fluctuate, and as well adjusts accordingly to reflect these unexpected changes. In doing so, it creates a more accurate and realistic financial plan that aligns closely with real performance.

According to Hugar and Kles (2022), flexible budgeting sets itself apart from the traditional static budget, which uses fixed figures that remain unchanged regardless of how much revenue a business actually realizes. They further stated that the flexible budget, in its most basic version, adjusts some expenses based on revenue levels by using percentages instead of fixed amounts; which enables unlimited number of adjustments to be made to anticipated costs that are directly related to actual income received. In Hugar and Kles (2022), this kind of budgeting is especially useful for preparing estimates across different scenarios, as it uses real-time figures for sales, revenue, and expenses; often from the current quarter. Thus, based on different outputs, such as sales or units generated, businesses can determine a variety of outcomes. Flexible or otherwise called; variable budgets enable managers to prepare themselves regardless of the outcome by allowing them to account for both low and high output.

Raza *et al.* (2021) drew a connection between budget flexibility and financial flexibility, describing the latter as a company's ability to access unused borrowing capacity when needed. This financial strength allows firms to secure funds on short notice, reducing the risk of missing payments or defaulting (Naz *et al.*, 2024). Naz *et al.* (2024) further noted that being able to raise funds quickly helps businesses manage unexpected situations without disrupting their financial stability. According to Raza *et al.* (2021), firms that are financially flexible intentionally preserve borrowing power, which enables them to respond swiftly to surprises and take advantage of growth opportunities as they arise. Islam *et al.* (2020) also emphasized that financial flexibility boosts a company's resilience and adaptability, allowing it to navigate a changing business environment and pursue profitable investments when they appear. Now, these views here are interrelated and compliments the contingency theory. This emphasizes the stages where budgets could be adjusted with ease.

As cited in Beck *et al.* (2018), the most known flexible practices related to budgets are budget revisions, reforecasts, and rolling forecasts (Bhimani *et al.*, 2018; Sponem & Lambert, 2016). Budget revisions are often part of the budget control process, where managers may have the chance to adjust targets or redistribute resources based on changing circumstances. Reforecasts, on the other hand, are designed to provide a more accurate and up-to-date view of financial expectations, without necessarily altering the original targets. Reforecasts might have a vital relevance in revenue and production level prediction (Cassar & Gibson, 2008) which might be deployed in terms of a firm's growth and profitability. Budget reforecasts indicate to a practice which consists of regular estimations of the main budget parameters such as revenue, which are restricted to the current budget year (Hansen, 2011). Meanwhile, rolling forecasts are forward-looking tools that keep the planning horizon continuously updated, often on a 12-month basis (Hansen, 2011). Recent studies have been citing that organizations can use reforecasts or rolling forecasts alongside the traditional annual budget, enhancing the budget's overall relevance and responsiveness (Sivabalan *et*

al., 2009).

2.1.2.2 Performance evaluation

Heydari *et al.* (2020) describe performance appraisal as a series of actions aimed at ensuring that resources are used as effectively and efficiently as possible to achieve both economic goals and organizational success. In their view, effectiveness means doing the right things at the right time and delivering the right level of quality. Practically, this is reflected in the ratio of actual outcomes to the expected results. Efficiency, on the other hand, is about doing things the right way, and is measured by comparing the expected use of resources with what was actually consumed. These are all long-known management accounting terms. When it comes to budgeting, planning, or forecasting, Frezatti *et al.* (2022) argued that the quality of these processes can be judged by how accurate they are. This accuracy is fundamental, and plays a central role in guiding management decisions and enhancing an organization's overall performance.

To add to the previous paragraph, highly accurate plans facilitate tactical and operational decisions related to sales, procurement, production, and other aspects within an organization, as well as serving as a key attribute for the manager's performance evaluation and that of their business unit (Brüggen *et al.*, 2021; Cassar & Gibson, 2008; Frezatti *et al.*, 2022; Jordan & Messner, 2020). Performance evaluation comes as a result of functioning of different components or let's say departments or divisions in the organization. It is expected that the different parts that make up the organization are functioning properly (Ogiedu *et al.*, 2009). Performance evaluation is a key mechanism for improving firm's management. According to Balogun *et al.* (2015), performance can be evaluated or could be both financial and non-financial.

Performance evaluation is pivotal to an organization as it helps determine whether the implemented budget and budgetary control measures have successfully achieved their intended outcomes within a given time frame (Egbunike & Unamma, 2017). It serves as a key tool for assessing how well an organization is performing. To effectively carry out this assessment, managers must first identify the organization's objectives which can't be overemphasized because if objectives are not set, that means there is no pursuit for any given organization. As Egbunike (2014) explains, performance evaluation typically involves two elements: organizational performance data and a benchmark which I would call it a threshold, which together provide a framework for meaningful evaluation. According to Egbunike (2014), the benchmark has to do with the standards based on performance of similar agencies/industrial standards/political expectations. The whole aim of performance evaluation therefore is to determine how efficient an organization is able to put into use, the resources at its disposal (Egbunike & Unamma, 2017). Efficiency is determined by observing performance output and outcome achieved considering the number of people involved in the process (productivity per person) and cost data (capturing direct cost as well as indirect). Be it as it may, beyond internal assessment, performance evaluation can also serve as evidence of a company's success, helping to justify requests for additional resources, build trust among customers and stakeholders, strengthen staff loyalty, and gain recognition both within and outside the organization

(Siyanbola, 2013).

2.1.2.3 Variance analysis

The term "variance" refers to the discrepancy between the actual cost of production and the standard cost of production, or alternatively, the gap between the actual revenue and the projected revenue (Oluwayemisi *et al.*, 2024). Similarly, Idornigie (2005) views variance as the difference between what was actually achieved and what was originally planned or expected. These differences can signal whether performance fell below expectations or exceeded them. In other words, variance is a term used for the difference between actual cost and standard cost (Jones & Godday, 2015). They added that a favourable variance occurs if actual costs are less than standard cost. Ordinarily, favourable variance is assumed to signify efficient performance. An unfavourable variance arises if actual cost goes above standard cost (Jones & Godday, 2015). An unfavourable variance is supposed to indicate inefficient performance. However, whether performance is really efficient or inefficient will be known only when variances are analyzed in detail by their causes. This process is known as variance analysis.

In Arora (2006), variance analysis as the process of examining differences between actual and expected performance by breaking down the total variance. This process helps management trace the source of any deviations and hold the appropriate individuals accountable, whether performance falls short or goes beyond the expected standard. Oluwayemisi *et al.* (2024) viewed variance analysis as a component of managerial accounting and budgetary control, and stated that it is critical in assessing performance deviations from planned budgets and guiding strategic decisions. They added that invariably, cost plays a prominent decision-making role in the life of an individual and a business or non-business organisation. Alloui and Mourdi (2023) further reinforced this idea, stating that cost management is at the heart of daily financial operations due to its critical impact. However, Oluwayemisi *et al.* (2024) also pointed out that variances are a normal part of budgeting, stating that actual outcomes rarely match the standard figures, even when those standards are realistic. Importantly, as Bier (2020) noted, the presence of a variance shouldn't automatically be seen as a failure or a reason to blame the person in charge. Instead, it should alert management that something unexpected has occurred, possibly requiring investigation and explanation, so that future expenditure and expenses can be better managed and controlled.

Variance analysis however, is solely dependent on data availability. This idea was also present in Lescrauwaet *et al.* (2022) who stated that the effectiveness of variance analysis heavily depends on the accuracy and reliability of the data used. In many instances, when there are issues in how data is collected, processed, or interpreted, the resulting variance reports can be misleading; leading management to make poor decisions based on flawed insights. A common issue is the disconnect between the financial information that variance analysis provides and how that information is used in decision-making across different levels of organizational or departmental management. This disconnect often results in organizations failing to fully leverage valuable insights for strategic planning or day-to-day operations. Many other reasons why variance analysis might not be beneficial or

effective were also cited. Marttunen *et al.* (2017) asserted that many employees lack the necessary skills to properly carry out, interpret, and apply variance analysis in ways that support better decision-making. This lack of expertise can prevent companies from fully realizing the benefits of variance analysis. In addition, weak technological infrastructure can pose a significant challenge. Hung and Shanmugam (2023) emphasized that today's fast-paced business environment demands advanced, real-time analytical tools to track variances and respond quickly. They added that many companies, especially in the retail sector, may not have access to or may not fully utilize these technologies which is true, taking Nigeria as case study. To conclude, the main purpose of variance analysis is to enable proactive decision-making by pointing light at specific areas where management can focus its attention to improve performance (Akinola & Efuntade, 2021).

2.1.2.4 Budgeting procedure compliance

Budgeting is more than just writing down numbers, it's about following a structured path that leads an organization toward achieving its goals. Bashuna (2013) emphasized that it's common practice for organizations to prepare a budget at the beginning of the financial year to guide operations and ensure resources are used effectively. But beyond just having a budget, the way that budget is prepared, reviewed, and approved; what we refer to as budgeting procedure compliance plays a very giant role in how well the organization stays focused on the quest. Mohamed *et al.* (2015) also touched on the significance of the budgeting process by relating it to performance evaluation. They suggested that when the budgeting procedures are properly followed, decision-making improves and underperformance becomes easier to detect and correct. Their idea revealed how many budgeting concepts including those in this study are actually interconnected.

Simply put, budgeting procedure compliance ensures that all steps in the budgeting process are followed in line with the organization's policies. Without this compliance, an organization might be operating on a shaky foundation encompassing planning without due consultation, skipping stakeholder involvement, or even preparing budgets without reliable data (Umoh, 2015). According to Fiveable (2024), proper budgeting procedures are essential for effective fund management, though the focus was on environments like government and non-profits. These were noted as areas where accountability to the public and donors is critical. Fiveable (2024) stressed that failure to follow due process can lead to consequences such as sanctions, funding cuts, or reputational damage. That's why ongoing review and adaptation of the budget not just the numbers but the process too is necessary to keep the organization aligned with evolving conditions.

Abdurahmat (2003) looked at the subject matter from the lens of effectiveness, defining it as the intentional use of resources, facilities, and infrastructure to accomplish targeted results within a given timeframe. Tying this back to budgeting procedure compliance, one could argue that when procedures are rightly followed, the result is often increased organizational effectiveness. Be that as it may, Abdurahmat (2003) also made it clear that effectiveness isn't one-size-fits-all; it depends on who's doing the evaluating. In an example, it was stated that a school administrator might measure effectiveness by academic outcomes, while a production supervisor could focus on units manufactured.

Commonly, there's a thread: comparing planned outcomes to actual results is how effectiveness is truly measured and that starts with following the right procedures from the very beginning (Umo, 1999).

Taking a dive further, Steers *et al.* (2004) broke down organizational effectiveness into three key indicators to include; achievement of goals, integration, and adaptation. In their view, a goal is only meaningfully achieved when it's time-bound and realistic, this idea again reinforced the importance of proper budgeting timelines and clearly defined targets. Integration, as they put it, reflects how well an organization interacts with other bodies something that is enhanced when budgeting procedures promote transparency and stakeholder participation. Adaptation, on the other hand, looks at how quickly an organization can adjust to changes in its environment, which budgeting procedures also influence by encouraging flexible planning and responsive revisions.

2.1.2.5 Participatory budgeting

Participatory budgeting could be seen as budget participation and was defined as a budgeting approach that gives room for managers who will be responsible for the budget performance, to take active part in the development of the budget (Hansen & Mowen, 2013). The whole idea of budget participation is such that individuals in an organization are involved, and influence in regulating budgets that directly applies to them. Dharmanegara *et al.* (2016) supported this view by stating that budget participation is a process of making decisions together by different parties in an organization where the decision will have a direct future effect or impact on those who make it. It is a way of getting everyone involved in decision making in an organization, to some extent. As cited in Pakpahan and Augustine (2019), Anthony *et al.* (2005) laid emphasis on the two advantages of participatory budgeting with the first being that the objective of the budget will be easily accepted if the budget is under the supervision of managers and the second point being that it would foster effective information exchanges between organizational participants.

Participatory budgeting has been linked to the agency theory's information asymmetry and how it could be a good solution option. According to the agency theory, information asymmetry occurs because of diverse interests of management and owners of capital (Jensen & Meckling, 1976). This points to a scenario where shareholders (the owners of capital) want the company to do well so they can earn dividends or see the value of their shares go up. Meanwhile, management, who are just hired to run the company, are more concerned with increasing their own benefits, like getting higher pay. Because of this, managers might avoid sharing information that could hurt their own interests especially if it makes them look bad. Now, channelling these ideas into a typical organization where strategic decisions are made by the management including budgeting for future periods, the management usually have more information than the subordinates but participatory budgeting could be a solution to this information asymmetry since everyone is welcome to be involved in the budgeting process (Basuki, 2015).

Through that process, information on organizational strategy is spread to every organizational participant and they could have it at the back of their minds when discharging the responsibilities of their job descriptions. Surely, it has been emphasized that budget participation communicates a sense

of responsibility to lower-level managers and encourages creativity (Pakpahan & Augustine, 2019). Also, it has been cited that budgetary participation can influence an individual's cognitions and motivations (Chong *et al.*, 2005). This motivation could come from feeling relevant. Pakpahan and Augustine (2019) linked this to organizational commitment, job satisfaction, job performance as well as organizational culture, and also added that it is not one sided, that information needed by managers can be obtained from subordinates in participatory budgeting. Of course, information is needed even by top management to take certain decisions and some of such information lies with the employees (Umo, 1999). This information would help them make budget for the purpose company a whole.

2.1.3 Operational performance

Operational performance basically shows how well a company carries out its day-to-day activities and uses its resources to achieve set objectives. This well relates with budgeting since it has to do with set objectives at its core. Operational performance reflects the organization's ability to run efficiently and effectively across areas encompassing production, service delivery, cost management, and internal processes. According to Erasmus and Uwikor (2021), performance over time can be observed through how resources are collected and utilized, and while they focused on financial indicators like capital adequacy and liquidity, the same principle applies when looking at operational indicators, such as productivity, process efficiency, and most importantly, cost control. Operational performance is essential because it directly affects the ability of a firm to stay competitive and deliver value consistently.

Traditionally, operational performance shows how well an organization converts inputs into outputs whether that means producing goods or delivering services. Naser and Mokhtar (2004) noted that strong performance interprets into both effectiveness and efficiency in managing resources. When applied to operations, this means a company that reduces waste, and consistently meets its targets is surely likely to outperform competitors and survive in the long run. Curristine (2005) and Ilesanmi (2011) both defined performance as the result or output of actions taken toward specific goals. In operational terms, this means measuring how well tasks are executed compared to plans, and again, this is the whole idea of budgetary control. The better the operational performance, the closer the organization gets to meeting its strategic and operational goals. Ghosh and Subrata (2006) added that management decisions around how organizational resources are handled can significantly influence overall performance. Stated differently, well-planned and efficiently executed operations can reduce friction between stakeholders and keep the organization aligned.

Researchers in management sciences have in the past, examined the importance of operational performance, because it directly affects how well an organization delivers on its promises. Strong performance in operations is said to signal that management is making smart, timely decisions and keeping the system running smoothly all of which contribute to the larger goal of organizational success (Naser & Mokhtar, 2004). Just like with financial performance, there are both objective and subjective ways to measure operational performance. Masa'deh *et al.* (2015) stated that while objective indicators focus on quantifiable data, such as

production output or service delivery time, subjective measures rely on managerial assessment and internal benchmarking. In common parlance, firms often evaluate things like productivity levels, customer satisfaction, turnaround time, cost efficiency which was this study's proxy, and adherence to operational plans. In the past, firms relied heavily on historical records such as internal reports, or operational audits to track performance (Kurawa & Saidu, 2018). Even though these methods were like a backward-looking view, they still remain useful for understanding trends and areas needing improvement (purpose of budgetary control).

2.1.3.1 Cost efficiency

Cost efficiency refers to an organization's ability to achieve its objectives using the least amount of resources or expenditure, reflecting how well costs are managed relative to outputs. Drury (2004) explains that cost efficiency focuses on cost reduction through continuous improvement and change, rather than simply containing costs. Unlike traditional cost control systems, which are applied routinely, cost efficiency measures are often adopted on an ad hoc basis when specific opportunities for cost reduction are identified. While some scholars argue that cost efficiency approaches do not necessarily rely on accounting techniques (Nkpodot & Emenyi, 2023). Others like Hwai-Shuh (2012) maintain that accounting plays a critical role in cost control and efficiency efforts.

Although reducing costs is central to cost efficiency, it should not compromise customer satisfaction (Sriyana, 2015). Effective cost efficiency requires a balance between minimizing expenses and maintaining quality and service. Irina *et al.* (2016) emphasized that efficiency and effectiveness must go hand in hand efficiency without effectiveness may not sustain an organization, and effectiveness without efficiency can lead to poor economic outcomes. Cost efficiency also aids in improving business processes by eliminating waste and non-value-adding activities (Chutimon *et al.*, 2020). According to Chutimon *et al.* (2020), increasing competition and limited resources have pushed firms to adopt strategies like standard costing, budgeting systems, and cost structure analysis, particularly during the pre-production stage to enhance cost efficiency and forecast future cost occurrences more accurately.

Firms that implement a cost efficiency strategy are better positioned to predict future expenses by analyzing both current and projected cost information, which in turn supports more informed managerial decisions and improved financial performance (Chutimon *et al.*, 2020). A well-structured cost efficiency system can enhance product quality, functionality, and pricing. Several approaches can be adopted to improve cost efficiency, such as investing in innovation, optimizing production processes, and building more direct relationships with suppliers to reduce input costs (Khalifaturofi'ah, 2018). Nkem and Akujinma (2017) highlighted the importance of efficient inventory management systems, which provide real-time stock data and help prevent overstocking or waste. Automating reorder systems can also minimize the risk of stockouts. Rather than cutting wages; which is often unsustainable, organizations are encouraged to explore flexible staffing options, such as hiring freelancers or outsourcing non-core tasks. This not only reduces costs but also enables internal teams to focus on more strategic responsibilities (Hwai-Shuh, 2012).

2.1.4 Effect of budgetary control tools on operational performance

In an effort to contribute to the literature, this section looked at all possible effect that budgetary control tools (proxies) may have on operational performance proxied by cost efficiency. For each subheading, both positive and negative effect were emphasized.

2.1.4.1 Budget flexibility and cost efficiency

The relationship between budget flexibility and cost efficiency isn't always straightforward. As seen in some studies like Islam *et al.* (2020) and Raza *et al.* (2021), it can go either way depending on how it's applied and managed. On the good side, having flexibility in the budget gives organizations the ability to adapt to unexpected changes, like shifts in market conditions or operational needs (Zhang *et al.*, 2020). This can make it easier to allocate resources where they're most needed, reduce waste, and ultimately improve cost efficiency. In fast-changing environments, this kind of adaptability can be a real asset. Kumar and Vergara-Alert (2020) even observed that companies with high flexibility perform better. All these have been discussed in the earlier sections of this work. However, there's also a flip side; too much flexibility can backfire if it's not kept in check. Without proper controls, it can lead to overspending, poor planning, or a lack of focus on long-term goals. In some cases, constantly adjusting the budget might even cover up inefficiencies instead of fixing them (Ali & Siddiqui, 2020).

Checking with past literature, there has been no consensus pertaining to this relationship. Raza *et al.* (2021) noted that financially flexible firms strategically maintain a reserve of borrowing power which gives them the flexibility to react quickly to unexpected circumstances and capture future growth opportunities. Islam *et al.* (2020) added that this financial flexibility enhances a company's resilience and adaptability by managing the changing business environment and opting for profitable investment opportunities. Zhang *et al.* (2020) also added that having financial flexibility helps to avoid the expenses that come with unfavourable circumstances. Kumar and Vergara-Alert (2020) in their study found out that companies with higher financial flexibility exhibit a substantially higher Tobin's Q compared to their less flexible counterparts. Ali and Siddiqui (2020) established that financially flexible companies exhibit stable and superior financial performance as compared to other firms. Similarly, Nwanyanwu and Ogbonnaya (2018) found marginal costing and budgetary control practices of SMEs in Rivers State to be significant in associating positively with their net profits and returns on equity respectively. Marginal costing is a popular concept in flexible budgets.

2.1.4.2 Performance evaluation and cost efficiency

Regular performance assessments, including budgetary evaluations, can help organizations spot inefficiencies, measure employee productivity, and ensure that departmental efforts align with overall financial goals (Pimpong & Laryea, 2016). This alignment often results in improved resource management and cost efficiency. When teams are held accountable and outcomes are consistently monitored, there tends to be a stronger focus on value-adding activities and responsible financial behavior (Koech, 2015). However, as Kipkemboi (2013) suggests, the presence of budget reviews alone doesn't automatically translate to success, especially when the evaluation

frameworks are unclear or overly focused on short-term metrics. In such cases, employees may feel pressured to cut corners or prioritize targets over quality, leading to inefficiencies in the long term.

Gilbert Mutai Koech (2015) evaluated the financial performance of several manufacturing businesses in Kenya using budgetary review. His results demonstrated that there is a substantial positive link between budgetary review and manufacturing businesses' financial success. Similarly, Pimpong and Laryea (2016) showed that budgetary evaluation has a positive impact on business performance. On the contrary, Simidi *et al.* (2021) found that budgetary evaluation is strongly detrimental to financial performance; implying that budgetary evaluation has a significant negative relationship with financial performance. Also, Kipkemboi (2013) carried out an impact assessment of the financial performance of NGOs in Kenya, and observed that the link between budgetary assessment and performance is poorly favourable; implying a non-statistically significant relationship. He believes that the main reason for excellent performance may not be fiscal evaluation.

2.1.4.3 Variance analysis and cost efficiency

The relationship between variance analysis and cost efficiency is honestly a bit of a two-edged sword. On the one hand, when properly applied, variance analysis helps firms compare actual performance to what was initially budgeted. This makes it easier to spot where things went off track, identify inefficiencies or cost overruns, and take practical steps to do better next time. Studies like those of Ali-Momoh *et al.* (2022) and Ebiringa (2011) supported this point, noting that variance analysis positively influences financial performance by guiding better cost control and resource use. In fact, Ebiringa (2011) even emphasized that in manufacturing firms, the success or failure of variance analysis often shows up in the bottom line. This goes to show that, when done well, variance analysis can be a strategic tool for financial discipline and performance improvement.

Review of related literature revealed the study of Muhammad *et al.* (2022) which revealed that labour variance has positive significant effect on organizational performance; implying that variance analysis has a significant positive relationship with performance. Similarly, Ali-Momoh *et al.* (2022) concluded that variance analysis has a significant positive statistical link with the financial performance of listed consumer goods firms in Nigeria. Ebiringa (2011) in his study was of the opinion that the bottom line of a manufacturing firm always seems to reflect the success of a variance analysis. This view was supported by the finding of Adu-Gyamfi and Chipwere (2020) which stated that cost analysis has a favourable and statistically significant effect on the financial standing of the companies they studied. Further related findings include that of Iliemena and Amedu (2019), stating that standard costing improves a company's capacity for strategic planning, operational efficiency, and sound decision making; as well as Lawal's (2017) which established that cost control has a good effect on organizational performance. All these point to the positive relationship that may exist between variance analysis and financial performance. Be it as it may, Simidi *et al.* (2021) found a significant negative relationship between budgetary variance and financial performance in their study.

2.1.4.4 Budgeting procedure compliance and cost efficiency

Although no study has specifically examined the direct relationship between budgeting procedure compliance and cost efficiency, several existing studies offer useful views that point toward a positive connection. For instance, Kindström and Kowalkowski (2014) found that structured approaches tend to support cost-efficient actions, boost profitability, and enhance overall productivity. Similarly, Li *et al.* (2017) noted that reducing procedural ambiguity can help cut down transaction costs, making operations leaner and more efficient. Abou-Foul *et al.* (2021) also observed that disciplined strategy implementation has a positive impact on financial performance. In the same vein, Verhoef *et al.* (2021) showed that formalized processes improve internal controls, create added value, and elevate operational efficiency. Smania *et al.* (2022) contributed by showing that structured planning procedures can drive innovation and influence both financial and non-financial performance. Eller *et al.* (2020) shared a similar view, emphasizing that while structured compliance positively impacts outcomes, its success depends on factors like organizational infrastructure, workforce skills, and clarity of goals. Most relevant to budgeting, Bergmann *et al.* (2020) found that when organizations give importance to their budgeting functions and adhere to structured processes like business analytics integration, they tend to be more satisfied with their budgeting outcomes.

2.1.4.5 Participatory budgeting and cost efficiency

Eluzai (2019) found that budgetary participation has a strong positive impact on financial performance. From a practical standpoint, it makes sense to believe that when employees are actively involved in the budgeting process, they are more likely to comply with it. Participation here isn't just about being informed, it involves team members working together to define budget goals and later reviewing those goals alongside management. This sense of inclusion can strengthen ownership and accountability. Likalama (2017) supports this view by showing that when people are involved in the budget process, it becomes easier to understand the reasons behind budget variances and to take corrective action quickly. Similarly, Onduso (2013) and Umo (2022) found that budgets significantly influence the financial performance of manufacturing firms, particularly when measured by return on assets (ROA). Olaniyan and Efuntade (2020) also pointed out that budget evaluation, monitoring, and control have a meaningful connection to financial outcomes. Beyond just numbers, Mohd Noor and Othman (2012) revealed that budgetary participation can improve managerial performance by boosting commitment to organizational goals. Likewise, Chong and Chong (2002) highlighted that sharing budget information builds a sense of control, trust, and collaboration among subordinates, all of which enhance job performance and deepen commitment. Altogether, the evidence suggests that involving people in budgeting isn't just good practice, it has real, measurable benefits.

2.2 Theoretical framework

The following theories were adopted and relevant to the study.

2.2.1 Contingency theory by Fiedler (1967)

As cited in Shala *et al.* (2021), the contingency theory of leadership was developed by Fred Fiedler (1958) during his

research on leadership effectiveness in group settings. The core idea of the theory is that there is no single best way to lead or organize; instead, success depends on the fit between leadership style or organizational structure and specific situational factors. Bastian and Andreas (2012) noted that the theory adopts a behavioural approach, emphasizing that optimal outcomes are achieved when leadership or management approaches align with the context in which they are applied. Similarly, Omoluabi (2016) explained that the term "contingency" refers to the relationship between two conditions; when one condition exists, it informs what can be expected from another. Often referred to as the situational approach, contingency theory holds that because organizations face different internal and external conditions, they require tailored management principles, rather than a one-size-fits-all model.

Although the contingency approach isn't as widely used as some change management methods, it brings a practical and flexible way of thinking about how organizations should be managed (Harney, 2023). At its core, it encourages managers to recognize that every situation is different and that there's no one-size-fits-all solution (Shala *et al.*, 2021). Instead of sticking to rigid rules, it suggests that the best way to structure or run an organization depends on the specific circumstances it faces; like the kind of work being done or the environment in which it operates. For example, what works well for a large manufacturing firm might not suit a smaller, fast-paced tech startup. As Omoluabi (2016) explained, this theory builds on earlier ideas by showing that different situations call for different responses, and as Dobak-Antal (2010) put it, sometimes the right answer simply depends on the context. This makes contingency theory especially useful when dealing with the real-world complexities organizations face every day.

This theory is the anchor theory for this research, and is relevant because the focus of contingency theory is in its core proposition that the effectiveness of management practices; such as budgetary control tools, depends on how well they align with the specific conditions faced by an organization. Since this research examines how tools like budget flexibility, performance evaluation, and variance analysis influence cost efficiency, it naturally aligns with the contingency perspective that there is no one-size-fits-all approach to managing resources. For instance, a budgeting approach that enhances cost efficiency in one brewery may not yield the same results in another due to differences in size, market dynamics, or internal processes. The theory provides a useful lens for understanding how managers must adapt budgeting strategies to fit the operational realities and performance needs of their firms, most especially flexible budgeting. Since flexible budgeting alongside performance evaluation and variance analysis give room for adjustments in the short or long run where the performance or expectations are lagging, the idea of contingency applies.

2.2.2 Theory Alpha and Theory Beta by Douglas McGregor (1960) and Usen Umo (2024)

Douglas McGregor's groundbreaking work in 1960 introduced the Theory X and Theory Y which is now well-known globally, which explored two contrasting assumptions about human behaviour in the workplace. The assumption of Theory X is that people inherently dislike work and must be coerced or controlled, while Theory Y suggests that people are self-motivated, seek responsibility, and can be creative when properly engaged and this

foundation sparked decades of thought around motivation, leadership, and organizational behavior. Building on this, McGregor's ideas provided a psychological lens for understanding management practices and how different assumptions can shape outcomes, especially in areas like planning and control (McGregor, 1960).

Years later, Umo (2025) took this conversation further by developing what he termed Theory Alpha and Theory Beta of motivational budgeting. Taking inspiration from McGregor's work, Umo framed Theory Alpha as a rigid and control inclined approach to budgeting, where management imposes tight rules and decisions are made top-down similar to Theory X. In contrast, Theory Beta according to him promotes participation, flexibility, and a sense of shared ownership in the budgeting process mirroring the spirit of Theory Y. According to Umo (2025), in the organizations that adopt Theory Beta, budgeting tends to foster innovation and commitment, as employees feel more involved, empowered and goal oriented during the budgeting process (budget formulation and control). The theory has gained relevance in today's fast-changing business environment with even more adaptive potentials, the idea is that inclusive approaches often outperform strictly centralized models (Umo, 2025; McGregor, 1960).

2.2.3 Goal Setting and Realization Theory by Usen Umo (2024)

The Goal Setting and Realization Theory, developed by Usen Umo (2024), presents a contemporary framework within motivational budgeting that directly links the processes of goal setting, goal acceptance, and goal realization to organizational performance. Unlike traditional perspectives that stop at the formulation of goals, Umo (2024) emphasizes that it is not sufficient for managers to merely define budgetary targets; those targets must be accepted, internalized, and pursued consistently by the employees and units responsible for achieving them. The theory therefore bridges the gap between planning and execution by showing how motivational factors determine whether budgetary control mechanisms translate into improved operational outcomes.

According to Umo (2024), the budgeting system operates through two interdependent "machines": the goal-setting machine, which consists of top management and budget officers who formulate budgetary targets, and the goal-achieving machine, which includes the subordinate managers, operational staff, and other actors who must implement and comply with the budget. For budgetary control to be effective, there must be synergy between these two machines. Goals that are set without participation from the achieving machine often face resistance, leading to poor compliance and suboptimal performance.

The theory further highlights three central dimensions of effective budgeting: direction, effort, and persistence. Direction refers to the clarity of budgetary targets, which ensures that employees understand what is expected of them and where to focus their resources. Effort reflects the level of commitment and energy expended toward achieving the budgetary goals, while persistence represents the ability of employees to sustain their efforts over time despite challenges. Together, these dimensions explain how specific budgetary targets can translate into measurable improvements in organizational efficiency and productivity when properly managed (Umo, 2024).

A critical element of the theory is the acceptance of budgetary goals, which serves as the mediator between goal setting and realization. Umo (2024) stresses that participation in the budgeting process enhances acceptance, as employees are more likely to commit to goals that they perceive as fair, realistic, and partly self-determined. In contexts such as brewing firms, where cost efficiency, raw material utilization, and production targets are central to performance, involving departmental heads and line managers in the budgeting process can increase ownership and compliance, thereby strengthening the effectiveness of budgetary control tools.

This theory is particularly relevant to research on budgetary control and operational performance because it integrates psychological motivation with managerial accounting practices. It explains why certain budgetary control mechanisms—such as variance analysis, performance evaluation, and cost control—yield better results when employees not only understand the targets but also accept and commit to realizing them. In essence, the Goal Setting and Realization Theory underscores that the success of budgetary control in enhancing performance depends on aligning managerial intentions with employee motivation through goal clarity, acceptance, and persistent effort.

2.3 Empirical Review

This section presents studies carried out by various researchers on the effect of budgetary control tools on operational performance.

Kihara and Macharia (2025) investigated the relationship between the financial performance of Kenyan insurance companies listed on public markets and their financial management practices. Specifically, it examined the impact of working capital management, capital budgeting, and capital structure on financial performance, as well as the moderating role of inflation in the relationship between financial management practices and performance. An explanatory research design was adopted, and all six listed insurance companies were included in the census due to the small population. Panel secondary data covering the period from 2015 to 2022 was utilized. Data analysis involved both descriptive and inferential statistics. The results showed a strong positive association between working capital management and financial performance. Capital budgeting also demonstrated a positive and significant relationship with financial performance, while capital structure exhibited a high and negative correlation. Furthermore, the study found that inflation negatively moderated the relationship between financial management practices and financial performance. Based on the findings, it was concluded that while working capital management and capital budgeting positively influenced financial performance, capital structure had a detrimental effect.

Mahara (2025) explored the relationship between management control systems (MCS) and organizational performance of firms in Kailali District. MCS was identified as a crucial tool for strategic planning, budgeting, decision-making, and internal auditing to enhance manufacturing organizational performance. The study explored the effects of these tools on organizational performance, evaluating the significance of MCS components using descriptive statistics, correlation analysis, and multiple regression with primary data from 20 manufacturing organizations. The results

showed that internal audits, strategic planning, and decision-making positively and significantly affected organizational performance, while budget control had a positive relationship but an insignificant effect on organizational performance. Among all the MCS dimensions, strategic planning was found to be the most important in affecting the organizational performance of manufacturing firms. The findings were useful for managers of manufacturing firms in implementing management control dimensions and contributed to an area of comparison regarding management control systems.

Ukutegebe (2025) investigated the impact of budgeting and budgetary control on the performance of a manufacturing company in Nigeria, using Cadbury Nigeria Plc as a case study. It was explained that since wants are numerous while resources are limited, organizations strive to meet their needs using the limited resources available. As such, firms were said to adopt budgeting and budgetary control as tools to meet their needs at minimal cost while fulfilling their stewardship responsibilities to stakeholders. A descriptive research design was adopted, and data were collected through questionnaires administered to respondents. The study utilized a non-parametric tool, chi-square, for data analysis. Hypotheses were tested at a 5 per cent level of significance, and the findings revealed that budgeting served as a useful tool for guiding firms in assessing whether their goals and objectives were being achieved.

Abdikani and Ouma (2024) explored the influence of budgetary allocation on the performance of projects within Non-Governmental Organizations (NGOs) in Mogadishu, Somalia. A descriptive research design was adopted, targeting 78 managers and 390 senior employees across 78 NGOs. Stratified random sampling was employed, resulting in a sample size of 216 respondents, determined using Yamane's (1967) formula. Data were collected through questionnaires, and both descriptive and inferential statistics were used in the analysis. The findings revealed that employees largely agreed that proper budgetary control supports effective decision-making within NGOs and that budget knowledge is vital for workplace success, enhancing understanding of budget control techniques. The results also showed that the relationship between budgetary allocation and project performance improved significantly, with a regression coefficient of $\beta = 0.821$ and a p-value less than 0.01, indicating that a one-unit increase in budgetary allocation led to an 82.1 per cent improvement in project performance.

Ebhota *et al.* (2024) focused on the transformative impacts of digitalization, big data analytics, customer experience enhancement, and stringent budgeting controls on the financial performance of SMEs. It analyzed data from 825 SMEs using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings revealed that digital transformation significantly boosted customer experience, big data analytics, and budgetary controls. It was further established that enhanced customer experience and effective utilization of big data improved budgetary control processes, which were found to be critical for financial performance. The study showed that customer experience and big data analytics played mediating roles in the relationship between digital transformation and budgeting control, thereby emphasizing the interconnectedness of these variables. Additionally, financial efficiency was identified as a significant moderator in the relationship between budgetary

control and financial performance, highlighting its influence on economic outcomes.

Kabore (2024) studied the link between budgetary participation and the financial performance of French hotel companies, with a secondary objective of contributing to the management of these companies through recommendations derived from the findings. Using structural equation modelling, the researchers analyzed 113 responses from hotel managers in France. The results indicated that commitment to budget objectives mediated the relationship, as it motivated the use of information and communication technologies, which in turn led to improved financial performance.

Naz *et al.* (2024) examined the role of financial flexibility in the financial performance of the automobile sector from an Asian perspective over the period 2013 to 2022. It employed three different measures of financial flexibility: net cash flows, market capitalization, and degree of financial leverage. The two-step system Generalized Method of Moments (GMM) dynamic panel estimator was used for empirical testing of the hypotheses, utilizing secondary data from 19 listed automobile companies to assess firm performance. The findings revealed that the degree of financial leverage had a significantly negative impact on investment activities and Tobin's Q, in line with underlying theories such as the Trade-off Theory and the Theory of Investment. However, the degree of financial leverage had a positive effect on return on assets. The study recommended that policymakers and corporate managers take steps to reduce the risk of financial distress in order to enhance financial performance.

Owiti (2024) sought to identify the budgeting techniques used by the youth, determine the factors influencing the choice of capital budgeting techniques, and establish the effect of capital budgeting on the financial performance of youth enterprises in Kisumu Central Sub-County. It was anchored on the Economic Value Added theory and the Pecking Order theory and adopted a correlational survey design. The reliability of the research instrument was confirmed using Cronbach's alpha coefficient, while validity was assessed by finance experts. Piloting was conducted on 64 respondents, whose data were excluded from the main analysis. The study targeted 246 firms, with 192 valid responses obtained, resulting in a response rate of 78.05 per cent. Primary data were collected using questionnaires and analyzed using both descriptive and inferential statistics. The findings revealed that the unstandardized coefficients for payback period (PBP), net present value (NPV), and internal rate of return (IRR) were 0.196, 0.194, and 0.258 respectively, indicating that a one-unit percentage change in PBP, NPV, and IRR led to corresponding increases in financial performance by 0.196 per cent, 0.194 per cent, and 0.258 per cent. These results showed that PBP, NPV, and IRR were significant and positive predictors of financial performance. Additionally, it was established that capital budgeting practices collectively explained 58.4 per cent of the variance in the financial performance of youth-owned enterprises in Kisumu Central Sub-County.

Panyako and Miroga (2024) examined the influence of the budgeting process on the financial performance of the County Government of Trans Nzoia. The specific objectives were to determine the effects of budget control and auditing, as well as budget monitoring and evaluation, on the county's financial performance. Guided by agency theory, the study

employed a correlational research design and targeted senior and middle-level employees from the Finance and Economic Planning Department, Trade, Commerce and Industry Department, Public Service Management and Governance, and County Assembly Committees in Trans Nzoia County. Data were collected through questionnaires and analyzed using both descriptive and inferential statistics. The findings revealed a positive and moderate relationship between budget control and auditing, budget monitoring and evaluation, and financial performance. It was reported that 53.5 per cent of the variance in financial performance could be explained by these two budgeting components. Specifically, budget control and auditing accounted for 41.5 per cent of the variance, while budget monitoring and evaluation explained 36.6 per cent. The study concluded that these findings could inform policy formulation related to budgeting processes and financial performance in Kenyan county government.

Rahman and Sudrajat (2024) examined the effect of the budget control system on financial performance. The research used a quantitative approach, and secondary data were obtained through the documentation method. The population of the study consisted of companies in City X, and a non-probability sampling technique, specifically saturated sampling, was employed, where all population members were used as samples. The sample consisted of 90 companies in City X. The data analysis techniques included validity and reliability tests, normality tests, t-tests, and determination coefficient tests for hypothesis testing. The results revealed that the budget control system had a significant effect on the company's financial performance, indicating that a better financial control system led to improved financial performance.

Takwa *et al.* (2024) investigated the effect of budgetary practices on the financial performance of small and medium-sized enterprises (SMEs) in Douala, using regression analysis to examine the relationships between budget planning, communication, monitoring and control (M&C), and financial performance. Data were collected from a purposive sample of 150 SMEs, which included managers, accountants, and finance personnel to ensure representation across various sectors and enterprise sizes in Douala. The findings revealed significant positive associations between budget communication ($\beta = 0.235$, $p = 0.013$) and M&C ($\beta = 0.236$, $p = 0.018$) with financial performance, underscoring their essential roles in improving organizational efficiency and resource management. Budget planning also demonstrated a positive effect ($\beta = 0.172$, $p = 0.014$), highlighting its strategic relevance in the formulation of financial strategies. The study contributed by empirically validating these relationships in the context of Douala's SMEs, offering practical insights for enhancing budget management practices.

Usman *et al.* (2024) aimed to develop a participatory budgetary model to improve the performance of local government officials in Sigi, a local government area in Indonesia. It employed a qualitative research approach using phenomenology to describe the participatory budgeting phenomenon, with data collected from interviews with key financial and administrative officials. The findings indicated that the participatory budgetary model was effective in enhancing efficiency, effectiveness, and economic considerations related to good public governance practices within the local government. The results further revealed

three critical elements that influenced the performance of local government officials in participatory budgeting practices in Sigi: the managerial paradigm adopted by actors involved in budget formulation, the abilities and competencies of public representatives at the Musrembang forum and local parliamentary sessions, and the level of commitment demonstrated by local political parties and senior government officials in representing public aspirations during the budget formulation and development process.

Abdi and Mutswenje (2023) aimed to ascertain the relationship between the budgetary process and the financial health of manufacturing enterprises traded at the NSE, Kenya. Its specific objectives were to determine the impact of budgetary planning, involvement, control, and evaluation on the financial health of these firms. The research hypotheses were evaluated at a significance level of 0.05 and were grounded in three theoretical frameworks: incremental budgeting theory, priority-based budgeting theory, and risk-based budgeting theory. A correlational research design was employed, targeting forty-five respondents from nine manufacturing firms listed on the NSE, using a census approach. Primary data were used to measure the independent variables, while secondary data were used to assess the dependent variable. Data analysis involved descriptive statistics (means and standard deviations) and inferential statistics through an OLS multiple regression model using SPSS Version 26. Before analysis, normality, multicollinearity, and heteroscedasticity tests were conducted. The results were presented using graphs, frequency tables, and charts, and ethical considerations were observed throughout the study. The findings revealed that budgetary planning and budgetary control were statistically significant, leading to the rejection of their respective null hypotheses, while budgetary participation and budgetary evaluation were statistically insignificant, resulting in the non-rejection of their null hypotheses. The study recommended implementing budget plans informed by historical data to define allowances and variances for each department before line managers prepare their budgets. It further recommended that budgetary control should begin at the lowest organizational levels, with alignment to actual results and strategic planning, to enhance the financial health of industrial firms listed on the NSE.

Ahmad *et al.* (2023) empirically investigated the influence of financial flexibility on investment activities, cash holding, and firm performance, while also exploring how the sensitivity of investment activities to cash flow was determined by financial flexibility. The study used panel data from Pakistan-listed textile firms between 2011 and 2020, and regression analysis was conducted using E-Views software to test the study's hypotheses. Data were retrieved from the official website of the Pakistan Stock Exchange (PSX). The study found that financial flexibility was positively associated with investment activities, while it had a negative and significant impact on cash holding. The debt ratio and dividend payout ratio (both measures of financial flexibility) had a significant and positive influence on firm performance, as indicated by both ROA and OPM. The study concluded that financial flexibility had a direct influence on the performance and investment activities of textile firms in Pakistan, but a negative influence on cash holdings. The findings also suggested that financial

flexibility was a critical element of the firms' business strategy and played a vital role in investment decisions. It was found that companies with a high level of financial flexibility were less affected by crises.

Akani (2023) investigated the effect of financial planning on the performance of quoted food and beverage manufacturing firms in Nigeria. Secondary data were obtained from the financial statements of 21 quoted firms covering the period from 2012 to 2021. Return on equity was used as the dependent variable, while financial planning was measured through cash planning, capital budgeting planning, and inventory planning. Panel data methods were employed, and both fixed and random effects models were estimated at a 5 per cent level of significance. The fixed effects, random effects, and pooled estimates were tested, and the Hausman test was used to identify the most appropriate model. The results from the fixed effects estimation revealed an adjusted R-squared value of 0.972, indicating that the independent variables explained 97.2 per cent of the variation in return on equity among the firms. The study further reported that all the financial planning components had positive effects on the return on equity of the quoted firms during the period under review.

Baya (2023) discussed the importance of budgeting, planning, and control in improving the financial performance of manufacturing companies, particularly in developing countries. It explained that budgeting involves the creation of spending plans to ensure efficient resource utilization and noted its success in nations such as Kenya, India, and Somalia. The study was anchored on four theoretical frameworks: organizational theory, stakeholders' theory, contingency theory, and goal-setting theory. It was observed that manufacturing companies play a vital role in national economies, largely through export-driven operations supported by sound budgeting practices, strong internal controls, and proactive risk planning. Budgeting was described as a foundational tool for resource allocation, encompassing stages from initial planning to regular evaluation. Risk planning was highlighted as a preventative strategy against potential losses, addressing both likelihood and impact. The study concluded that by aligning budgeting, internal control systems, and risk management, manufacturing firms not only enhanced their financial performance but also contributed significantly to the broader economic development of their countries.

Kinyanzii (2023) sought to establish the influence of financial management practices on the financial performance of public secondary schools in Kathiani Sub-county. It specifically examined how budgeting, procurement, and financial recording practices affected financial outcomes in these schools. Conducted in Kathiani Sub-county, Machakos County, the study targeted 30 public secondary schools and utilized empirical literature to identify existing research gaps. The theoretical framework was based on Stakeholder Theory by Freeman, the Iceberg Theory of Money Management by Varma, and Agency Theory by Ross and Mitnick. A descriptive survey design was employed due to the relatively small population, and a pilot study involving three schools in Machakos Sub-county was conducted to confirm the reliability and validity of the research instrument. Data were collected using questionnaires completed by principals, deputy principals, and account clerks, and analyzed through descriptive and inferential statistics using Microsoft Office Suite and SPSS

version 21. Qualitative data were systematically organized and interpreted to draw logical conclusions. The study found that financial management practices had a statistically significant effect on the financial performance of public secondary schools in the area. When assessed independently, budgeting practices were found to have a significant influence, while procurement and financial recording practices also showed statistically significant impacts. The study further reported that budgeting practices were generally adhered to across most schools, and the findings for procurement and financial recording aligned with the reviewed empirical literature.

Njaga *et al.* (2023) looked to determine the effect of financial management practices on the financial performance of the State Department for Tourism in Kenya. It specifically examined the effects of financial planning procedures, internal control practices, financial reporting analysis, and fixed assets management practices. The study was guided by budget control theory, contingency theory, accounting theory, and conservative plan theory. A descriptive research design was adopted, targeting a population of 71 employees across eight state corporations under the department, and due to the small size, a census approach was used. Both primary and secondary data were collected; secondary data from audited annual reports and primary data via semi-structured questionnaires. A pilot test was conducted to evaluate the reliability and validity of the research instruments. The questionnaires yielded both quantitative and qualitative data; thematic analysis was used for the qualitative data, while SPSS version 24 was used for the quantitative data, applying both descriptive and inferential statistics. Descriptive statistics included frequencies, percentages, means, and standard deviations, while inferential analysis involved Pearson correlation and multivariate linear regression. The findings showed that financial planning techniques and internal control procedures had a positive and significant impact on the financial performance of the state corporations.

Sande *et al.* (2023) examined the combined effect of budgeting practices, public participation, and automated revenue collection systems on the financial performance of county governments in Kenya. It adopted a pragmatic research philosophy and an ex-post facto research design, targeting all 47 county governments in the country. Data were collected through questionnaires administered to controllers of budget in 45 counties. Both descriptive and inferential statistics were employed, including regression and correlation analyses. The findings indicated that the combined influence of budgeting practices, public participation, and automated revenue collection systems on financial performance was significantly greater than the effect of budgeting practices alone. Specifically, the joint model produced an R^2 of 0.566 and an F-value of 37.384 with a p-value less than 0.05, compared to an R^2 of 0.437 for budgeting practices alone. The study concluded that integrating these three components offers a more effective approach to improving the financial performance of county governments in Kenya.

Wadesango *et al.* (2023) aimed to establish the impact of financial management practices on an organization's financial performance, motivated by the observed decline in profitability at Hwange Colliery Company despite cost-cutting efforts. The research focused on the influence of existing procedures related to working capital management,

fixed assets management, capital structure, and investment practices. A descriptive research design and a quantitative approach were employed. The study targeted the company's administrative personnel, totalling 46, from which a sample of 30 was drawn. Data were collected using a structured questionnaire. Regression analysis and the Pearson correlation coefficient were used to assess the relationship between financial management techniques and financial performance. The findings revealed that financial management strategies had a significant impact on the financial performance of Hwange Colliery Company.

Asukile and Mbogo (2022) investigated the effects of budgetary practices on budget performance of Local Government Authorities (LGAs) in Tanzania and was carried out at Ilala Municipal Council using a survey research design. Data collected through questionnaires were analyzed using SPSS version 23. The research adopted Exploratory Factor Analysis, including the KMO and Bartlett's Test of Sphericity, along with simple regression and correlation analyses to examine the influence of budgetary practices measured by budget planning, participatory budgeting, and budget execution on budget performance, which was supported by indicators of efficiency and effectiveness. The findings revealed that budget planning, participatory budgeting, and budget execution were directly related and closely associated with budget performance. Among the three budgetary practices tested, it was found that budget planning was a significant driver of budget performance.

Halwiindi and Mwanza (2022) aimed to establish the effect of budgetary control on the financial performance of First Quantum Minerals. A mixed method approach was employed, utilizing both quantitative and qualitative data. Data were collected from primary and secondary sources, including financial reports of First Quantum Minerals and responses from a sample of 98 employees through questionnaires and informal interviews. Data analysis was conducted using financial ratios, SPSS, correlation analysis, and content analysis. The study found that budgetary control has a positive effect on the financial performance of First Quantum Minerals.

Katana *et al.* (2022) examined the influence of budgetary control on the financial performance of listed manufacturing firms in Kenya. Specifically, it examined the influence of liquidity control measured using the current ratio on financial performance. The study was anchored on liquidity management theory and adopted a correlational research design within a pragmatic research philosophy. It targeted all eight manufacturing firms listed on the Nairobi Securities Exchange (NSE). Data were analyzed using STATA to produce descriptive and inferential statistics. Descriptive results showed that the mean values for Return on Assets (ROA) and current ratio (CR) stood at 0.2078. Pearson correlation analysis revealed a significant positive relationship between CR and ROA, with an $r = 0.5952$ and a p -value of 0.0000. The Hausman test, with a p -value of 0.0924 (greater than 0.05), indicated the random effects model was more appropriate. The random effects model had a p -value of 0.000 and an R^2 of 0.5610, suggesting that budgetary control accounted for 56.1 per cent of the variation in ROA, with the remaining 43.9 per cent attributed to other factors not captured by the model. Moreover, liquidity control showed a significant influence on financial performance, with coefficient values of 0.2585

and p -values less than 0.05. The findings were expected to benefit managers and employees of listed manufacturing firms in evaluating performance and planning future growth. The study recommended that these firms consistently monitor their liquidity position to enhance financial performance and drive industrial growth.

Michira (2022) examined the effect of budget controls on the financial performance of SACCOs in Mombasa County. It was guided by four key theories: Accounting Theory in Budgeting Control, Theory of Budgeting, Control Theory, and Stewardship Theory. A descriptive research design was adopted, targeting a population of 40 managers from SACCOs licensed and operating within the county. Data were collected using both primary instruments, such as questionnaires, and secondary sources, including financial statements. The research instruments were tested for reliability, validity, and underwent diagnostic checks. Data analysis was conducted using descriptive and inferential statistics with the aid of SPSS. The study concluded that budget controls had a positive and significant impact on the financial performance of the selected SACCOs. More specifically, budget monitoring, budget planning, and budget review were found to have significant positive effects, while participative budgeting showed no significant influence.

Mligo and Maseko (2022) investigated the effect of the budgetary process on the financial performance of commercial banks; NBC, NMB, and CRDB in Dodoma, Tanzania. A mixed-method approach was adopted, utilizing both qualitative and quantitative data. The research employed a descriptive survey design and randomly selected 95 respondents. Data were collected through surveys, interviews, and documentary reviews, while descriptive statistics and multiple regression analyses were used for data analysis. The study was grounded in the Resource Allocation Theory and Structure Efficiency Theory. The findings revealed that the budgetary process had a positive and significant effect on the financial performance of the commercial banks, as evidenced by an R^2 of 58.6 per cent and an F -statistic of $F(8, 87) = 28.86$ with a p -value less than 0.000, indicating statistical significance.

Mohamed (2022) examined the effects of budgetary planning on financial performance, as well as the impact of budgetary monitoring and budgetary feedback on financial performance. The target population consisted of 60 employees from various organizations. Data for the study were collected using a questionnaire, and the findings were measured and displayed using the Statistical Package for Social Sciences (SPSS). The results focused on determining whether budgetary control had an impact on financial performance and whether a relationship existed between the two. The study found a significant relationship between budget planning and financial performance ($p = 0.237$). Additionally, it revealed a negative relationship between budget monitoring and financial performance ($p = -1.03$). A statistically significant relationship ($p = 0.916$) was also discovered between budget feedback and financial performance.

Muhammad *et al.* (2022) scrutinized the effect of variance analysis on the performance of Kaduna State Water Corporation. Variance analysis served as the explanatory variable, proxied by labour variance and customer satisfaction, while organizational performance was measured using innovation. The study focused on 2,057

staff members under Kaduna State Water Corporation within the Kaduna metropolis, as recorded by the Human Resources Department and Divisional Office Zaria (2021). After filtering invalid questionnaires, a valid sample of 324 respondents was obtained. A descriptive research design was adopted, and data were collected using questionnaires. Construct reliability and validity were confirmed, and multiple regression analysis was conducted using SPSS and PLS 2.0. The findings revealed that labour variance and customer satisfaction had a positive and significant effect on organizational performance. The study concluded that variance analysis had a considerable influence on the performance of Kaduna State Water Corporation. It recommended that the Corporation should continue using variance analysis to compare actual and standard performance indicators, and to maintain, adjust, or improve standards and overall performance.

Odhiambo (2022) examined the influence of budgetary compliance on the performance of county governments in Kenya and was anchored on agency theory, modern decentralization theory, and attribution theory. It adopted a descriptive research design and targeted all 47 county governments in the country. Secondary data were sourced from the Office of the Auditor General and the annual reports of individual county governments covering the period from 2017 to 2021. After data collection, both descriptive and inferential statistics were used, including frequencies, percentages, and simple and multiple linear regressions. The regression analysis yielded an R square value of 0.2472, indicating that 24.72 per cent of the variation in performance among the county governments could be explained by the four selected variables. The overall model was reported to be statistically significant, as evidenced by a p-value of 0.000, which was below the 0.05 threshold. The findings revealed that revenue transfer and local revenue collection had a positive and significant impact on performance, whereas budgetary compliance and recurrent spending were found to have no significant effect. The study concluded that both revenue transfer and local revenue collection were critical factors in enhancing the performance of county governments in Kenya.

Onyebuchi (2022) looked at the effect of the budgetary control system on the financial performance of manufacturing firms in Nigeria. Two objectives and corresponding hypotheses were developed to guide the research, which was anchored on the financial accessibility theory and the efficiency structure theory. A cross-sectional survey design was adopted, and a sample size of 60 was selected using convenience, quota, and snowball sampling techniques. Data were collected from both primary and secondary sources, and the Spearman rank correlation coefficient was employed for analysis. The findings revealed that the budgetary control system had a significant impact on the performance of firms in Rivers State. Additionally, the study found that prudent expenditure retirement significantly influenced the performance of employees within the manufacturing sector.

Sawe *et al.* (2022) investigated the effect of financial management practices on the financial performance of companies listed under the commercial and services segment of the Nairobi Securities Exchange (NSE). Specifically, it examined the influence of working capital management, cash budgeting, fixed asset management, and capital structure on financial performance. The research was

grounded in the Trade-off Theory, Contingency Theory, Modigliani-Miller Capital Structure Theory, and Fisher Separation Theorem. Adopting a positivist research philosophy linked with objectivism, the study employed an explanatory research design and targeted eight commercial and service companies that were listed and operational on the NSE between 2009 and 2020. It relied on secondary panel data obtained from financial statements, annual reports, and NSE data. Both descriptive and inferential statistics were used in the analysis; descriptive statistics provided trends, frequencies, means, and standard deviations, while inferential analysis included correlation and regression techniques. The study also conducted several diagnostic tests such as normality, linearity, multicollinearity, unit root, heteroscedasticity, autocorrelation, and the Hausman test to ensure that the classical linear regression model assumptions were met. The findings revealed that working capital management, cash budgeting, and fixed asset management had a positive and significant effect on financial performance, whereas capital structure had a negative but insignificant effect on the financial performance of the listed commercial and services companies.

Tuan and Rajagopal (2022) scrutinized the key managerial factors affecting the performance of Vietnamese SMEs, specifically examining business planning, organizational commitment, strategy implementation, and managerial control, with the budget process serving as a mediating factor. In the pilot study, 105 samples were collected using a convenience sampling technique, and the reliability of the research instrument was tested using Cronbach's alpha and exploratory factor analysis (EFA) via IBM SPSS 20.0. For the main study, a quantitative approach was employed using random sampling on 403 valid samples. The data underwent rigorous testing through Cronbach's alpha, confirmatory factor analysis (CFA), and EFA, while structural equation modelling (SEM) was used to test both the conceptual framework and research hypotheses. The research, conducted between October 2016 and June 2020, found that the budget process significantly influenced SME performance as a mediating factor. Among the four independent variables, strategy implementation had the highest total positive effect on SME performance, followed by organizational commitment, business planning, and lastly, managerial control.

Al-Mahroqi and Matriano (2021) analyzed the different budgetary control techniques that affected the financial performance of Oman Telecommunications Company, determined the ways in which effective budgetary control influenced financial performance, and evaluated the roles of top management in the application of budgetary control techniques. A questionnaire was prepared and used to collect data from employees in the financial department, as well as officials and supervisors from other departments. The questionnaires were distributed to 60 members, and the collected data were analyzed using Microsoft Excel to generate frequencies, percentages, and descriptive statistics. The findings indicated a positive relationship between budgetary control and the financial performance of the company. The results also revealed that the company favored the use of Responsibility Accounting, Revenue Budgeting, and Variance Analysis techniques. Furthermore, it was reported that management was regularly informed of deviations and that managers took timely corrective actions.

The study found that top management was aware of the significance of budgetary control techniques and provided support for their implementation.

Altameemi (2021) aimed at testing the effect of 'Financial Flexibility' (FF) on the market value-added by the firm size as a mediator variable. This study's statistic sample consists of 26 companies listed on the Amman stock exchange from 2010 to 2019. The FF and market value-added are independent and dependent variables, respectively. The data analysis was done by the Baron - Kenny methodology (1986) and Sobel-Test to analyze the hypothesized based on the corporate size's mediation effect role. The results concluded from the study of the effect of the company size on the relationship between FF and market value-added stated that the FF has a positive statistically significant impact, and there a partial mediation of the firm size effect upon this relationship due to the mediation effect is statistically significant based on Sobel test.

Etoromat (2021) worked on the topic "Budget literacy and financial performance of SACCOs in Kumi District," aimed to determine the effect of budget literacy on the financial performance of SACCOs in the area. A case study research design was employed due to its suitability for providing detailed and accurate descriptions of the study variables. The study population consisted of 343 individuals, from which a sample of 108 respondents was drawn, including the District Commercial Officer, commercial officers, SACCO board members, management team members, and general SACCO members. Both probability and non-probability sampling techniques were used in selecting the sample. Data were collected through three methods: questionnaire surveys for firsthand data collection, interviews with seven key informants (four commercial officers and three board members) to probe deeper and gather clarifications, and documentary review to obtain relevant background information. The instruments used included a research questionnaire, interview guide, and documentary review checklist. The data collected were both quantitative and qualitative; quantitative data were analyzed using SPSS version 25 (64-bit) to identify missing variables, while qualitative data were recorded in the researcher's notebook and later transcribed for clarity. The findings revealed that budget literacy had a strong positive relationship with the financial performance of SACCOs, with a correlation coefficient (R) of 0.743, a significance level of $p < 0.01$, and an R^2 value of 0.552, indicating that budget literacy explained 55.2 per cent of the variation in financial performance.

Hazaea *et al.* (2021) sought to verify the contribution of internal audit (IA), particularly its role in improving financial performance in Yemeni commercial banks, with specific attention to three factors: the independence and objectives of IA, the quality of IA, and the size of IA. It reviewed existing literature on the contribution and role of IA in enhancing financial performance and relied on data collected through questionnaires. A total of 90 questionnaires were distributed across nine commercial banks in Yemen (23 branches) operating under the supervision of the Central Bank of Yemen, out of which 81 (90 per cent) were returned and utilized for analysis. Data were analyzed using descriptive statistics, correlation, and regression techniques. The findings indicated that IA had a significant impact on the overall performance of Yemeni commercial banks. Moreover, the results revealed that the

auditors' efficiency, along with their financial and accounting experience, had a significant and positive influence on financial performance. However, the independence and objectivity of internal auditors were found to be highly insignificant for financial performance. Additionally, the size of the IA function and the frequency of auditors' meetings had a negative and significant impact on financial performance. The study offered recommendations aimed at enhancing the effectiveness of internal audit, which would in turn support improved financial performance.

Karimi and Makokha (2021) determined the effects of the budgetary process on the performance of county governments, using Migori County Government as a case study. The specific objective was to assess the effect of budgetary participation on the financial performance of the county. The research was anchored on the theory of budgetary process and the contingency approach. A descriptive survey research design was employed, targeting all 72 employees directly involved in the budgetary process. A census method was used for data collection, with questionnaires serving as the primary instrument. The instrument was piloted to ensure its validity and reliability. Inferential statistics, including ANOVA and multiple regression analysis, were used to analyze the data. The findings revealed that budgetary participation had a significant effect on both the budgetary process and the financial performance of Migori County Government.

Mbogo *et al.* (2021) investigated the effect of budgeting practices, specifically planning for cash flows (BP), controlling cash flows (BC), resource allocation (BRA), activity coordination (AC), and monitoring financial position (MFP) on the financial performance (FPM) of manufacturing Small and Medium Enterprises (SMEs) in Nairobi County, Kenya. A descriptive research design was adopted, utilizing a self-administered cross-sectional survey. Data were collected through questionnaires from a randomly selected sample of 156 manufacturing SMEs in Nairobi. Structural equation modelling was used to analyze the data. The results indicated that budgeting practices had a positive and significant effect on the financial performance of manufacturing SMEs. It was reported that strategic application of budgeting practices in areas such as planning, control, resource allocation, coordination, and financial monitoring could enhance the financial outcomes of these enterprises.

Mbuthia (2021) sought to determine the effect of the budgetary process on budget performance in county governments in Kenya, focusing on three specific objectives: budgetary planning, budgetary implementation, and budgetary monitoring. A descriptive survey research design was employed to assess the influence of budgetary controls on budget performance. Both quantitative and qualitative data were utilized, with primary data collected through questionnaires and secondary data gathered using data collection sheets. Judgmental sampling was applied to determine the sample size, which comprised all 47 heads of budget departments across the counties. A multiple regression model was used to analyze the cross-sectional data, with STATA software employed for statistical analysis. The findings were presented through graphs, tables, and figures. The study concluded that the budgetary process had a positive and significant effect on budget performance in Kenya's county governments.

Ngaira (2021) aimed to establish the influence of budgetary control practices on financial expenditure in public technical and vocational education training (TVET) institutions in Nairobi County, Kenya. It was anchored on the Agency Theory and Public Sector Budgeting Theory and employed a cross-sectional survey design to describe relevant data and characteristics of the study population. The target group included 21 TVET institutions and key stakeholders such as principals, boards of management (BOM), heads of departments (HODs), finance officers, accountants or bursars, and procurement officers. The findings revealed that budgetary planning had a positive and significant effect on financial expenditure ($p = 0.031$). Additionally, procurement planning ($p = 0.039$), cash management ($p = 0.038$), and audit control ($p = 0.043$) were all found to have positive and significant effects on financial expenditure. The results further indicated that among these variables, budgetary planning had the most significant influence, followed by procurement planning, audit control, and cash management.

Nyakundi (2021) assessed the influence of financial planning and was guided by the pecking order theory. It adopted a causal research design and targeted nine manufacturing companies that were operational during the study period. A census sampling technique was used, involving all manufacturing firms listed on the Nairobi Securities Exchange. Data were collected using a data extraction form, sourcing annual panel data from 2015 to 2019 from published financial statements. Descriptive and inferential statistics were used for analysis, with hypotheses tested at a 95% significance level. The findings were considered relevant to manufacturing firm management, stakeholders, government agencies, scholars, and academicians. The results revealed that debt management had a weak, negative, and statistically insignificant relationship with financial performance. However, net worth and long-term investment demonstrated a significant positive relationship with financial performance. The study concluded that both long-term investment and net worth had a meaningful and positive impact on the financial performance of manufacturing firms.

Oyedokun and Izile (2021) studied the effect of financial planning on the management performance of quoted manufacturing companies in Nigeria between 2010 and 2019. Panel regression analysis was employed, utilizing both fixed-effect and random-effect models with emphasis on the heterogeneity of cross-sectional units. The Hausman test was conducted with inferences drawn at a 5% level of significance. The findings revealed that firm size had a positive and significant effect on return on assets, with a coefficient of 0.1814 and a p-value of 0.0000. Conversely, leverage showed a negative and statistically significant effect on return on assets, with a coefficient of -0.0577 and a p-value of 0.0015. Liquidity also demonstrated a negative and statistically significant influence, with a coefficient of -0.32677 and a p-value of 0.0000. The study concluded that leverage and liquidity negatively affected the return on assets of quoted manufacturing companies in Nigeria.

Ronoh (2021) sought to determine the effect of financial management practices on the performance of housing cooperatives in North Rift Counties, Kenya. Specifically, it examined the influence of budgeting techniques, financing decisions, investment appraisal techniques, and working capital management on the performance of these

cooperatives. The research was grounded in budget theory, trade-off theory of capital structure, investment theory, and cash conversion cycle theory. A causal research design was employed, and the study adopted a census survey targeting all 18 housing cooperatives registered by the National Housing Cooperative Union in the North Rift Region as of July 2019. Both quantitative and qualitative methods were used for data collection and analysis, with primary data obtained through open, self-structured questionnaires. Content validity was assessed, and Cronbach's alpha coefficient was used to determine the reliability of the research instrument. Data analysis involved both descriptive statistics such as frequency tables, percentages, and means and inferential statistics, including correlation and regression analysis, with SPSS Version 20 facilitating the process. The findings revealed that budgeting practices had a positive and significant effect on performance ($\beta = 0.172$; $p < 0.05$), financing decisions had a stronger positive and significant impact ($\beta = 0.456$; $p < 0.05$), investment appraisal practices also had a positive and significant influence ($\beta = 0.207$; $p < 0.05$), and working capital management significantly and positively affected performance ($\beta = 0.175$; $p < 0.05$) of housing cooperative societies in the North Rift Region.

Schubert and Kirsten (2021) sought to examine the effect of budgetary control on the financial performance of SMEs in Germany. It employed a quantitative approach, gathering data from local business owners of SMEs located in three major cities; Munich, Berlin, and Stuttgart, due to their high concentration of SMEs. Surveys were both self-administered and distributed to the business owners. The research instruments used included questionnaires and an interview guide. The study found that budgetary control integrated the organization's strategic planning with budgeting and cost control processes. It also identified the budgeting and financial skills required for better decision-making, pinpointed key financial indicators for businesses, and clarified how and when to monitor them. Furthermore, budgetary control highlighted sources of financial and business data that, when translated into budgets, provided valuable insights into business and financial strategies. It also helped interpret budgets and performance metrics as communication tools and encouraged proactive thinking beyond traditional budgeting. Additionally, the study revealed that budgetary control economized management time through the application of the management by exception principle. The study concluded that budgetary control had a significant and positive relationship with financial performance, and its adoption enabled SMEs to enhance their financial outcomes while contributing to Germany's economic growth and employment.

Simidi *et al.* (2021) investigated the effect of budgetary control on financial performance through a comparative analysis of sugar manufacturing companies in western Kenya. The specific objectives were to examine the effects of budgetary planning, budgetary implementation, budgetary variance analysis, and budgetary evaluation on the financial performance of these companies. A descriptive survey research design was employed, and purposive sampling was used to select respondents involved in finance and budgeting cost centers. The sample was drawn from Butali and Nzoia Sugar Companies, representing the private and public sectors respectively in the western region. Primary data was collected using questionnaires, and both descriptive and

inferential statistical analyses were conducted. The descriptive analysis revealed that budgetary planning, budgetary implementation, budgetary variance analysis, and budgetary evaluation each had a direct positive impact on financial performance. The study concluded that budgetary control was essential to the financial performance process of the firms analyzed, and it recommended the continued application of all budgetary control processes as tools for financial control. It also highlighted the need for further research on other factors that might influence financial performance, noting that despite functional budgetary controls, the industry continued to experience persistent deterioration in profitability and liquidity, alongside increasing debt levels.

Acássia Guidini *et al.* (2020) investigated the relationships between budgetary participation, organizational commitment, and managerial performance through a descriptive, survey-based, and quantitative approach, employing trajectory analysis using data from 150 managers with budgetary responsibilities in Brazil's largest export companies. The findings revealed that budgetary participation influenced managerial performance both directly and indirectly. Directly, it was found that managers' involvement and influence in the budgeting process enhanced their performance, while indirectly, their participation in budgetary decisions increased their commitment to the organization, which in turn positively impacted their managerial performance.

Keng'ara and Makina (2020) assessed the effect of budgetary processes on organizational performance within non-commercial marine agencies in Kenya. The specific objectives were to determine the effects of budgetary planning, budgetary control, and the implementation and evaluation stages on organizational performance. The study was grounded in four theoretical frameworks: Budget Cycle Theory, Agency Theory, Institutional Theory, and Stewardship Theory. A descriptive research design was employed, and the research was carried out in Mombasa County, targeting Heads of Departments in Finance, Procurement, Audit, Monitoring and Evaluation, as well as Chief Executive Officers within the marine sector. A total of 70 respondents formed the sample size, and data were collected using questionnaires, alongside relevant secondary data from organizational archives. Content validity was applied to ensure the quality of the instrument. The data were analyzed using multiple regression analysis to examine the relationship between the variables and were presented in tables. The findings revealed a significant positive relationship between budgetary processes, including planning, control, implementation, monitoring, and evaluation and organizational performance. The regression analysis showed an R value of 0.834 and an R square of 0.65, indicating that 65 per cent of the variation in organizational performance could be explained by the budgetary process variables. Correlation analysis further confirmed a positive association between budgetary processes and performance outcomes.

Nair *et al.* (2020) examined the effects of the budgetary process specifically budgetary planning, participation, control, and evaluation on the financial performance of SMEs in Yemen. Data were collected from 200 business owners across the country. The findings confirmed that budgetary planning and budgetary control had a significant relationship with the financial performance of SMEs in

Yemen, indicating that these two aspects of the budgetary process positively influenced financial outcomes.

Olaniyan and Efuntade (2020) examined the effect of budget and budgetary control systems on the financial performance of tertiary institutions in Nigeria. It specifically investigated the relationships between budget planning, monitoring and control, budget participation, budget evaluation, and financial performance indicators such as operating cash flow, current ratio, debt-equity ratio, and asset turnover. An ex-post facto research design was adopted, and relevant data for the variables under study were extracted from the Central Bank of Nigeria (CBN) statistical bulletin. The study covered a fifteen-year period from 2004 to 2019, and data were analyzed using the error correction model. The findings revealed the presence of co-integration, indicating a long-run relationship among the variables. It was further established that budget planning, evaluation, and control had significant relationships with financial performance, while budget participation did not show a significant relationship with the financial performance of tertiary institutions in Nigeria in the long run.

Sastrawan *et al.* (2020) examined the effect of budgetary participation on managerial performance, with internal control and organizational commitment as intervening variables, in PT Perkebunan Nusantara VII, a state-owned plantation company. Data were collected through a questionnaire survey of 100 respondents involved in the budgeting process and analyzed using Structural Equation Modelling (SEM) via SmartPLS 3.2 software. The results revealed that budgetary participation had a direct positive effect on managerial performance. Furthermore, internal control was found to mediate the relationship between budgetary participation and managerial performance. However, organizational commitment did not serve as a significant intervening variable in this relationship.

Zonatto *et al.* (2020) investigated the effects of budget participation on management attitudes, job satisfaction, and managerial performance of controllers in Brazilian companies. A descriptive, survey-based, and quantitative research design was employed, using a sample of 316 individuals with budgetary responsibility. The findings revealed that budgetary participation had a direct and positive effect on managerial attitudes toward budgeting, job satisfaction, and the performance of controllers in budget-related activities. Additionally, it was found that managerial attitudes and job satisfaction mediated the relationship between budgetary participation and managerial performance. The study also established that budgetary participation enhanced the use of budgets for performance evaluation and contributed to the development of managerial budgetary knowledge.

Boama-Secu (2019) investigated the effect of budgetary control on the financial performance of selected small and medium-sized enterprises in the transport industry in Accra. The specific objectives were to ascertain evidence of budgetary control practices in the selected firms, examine the relationship between budget planning and financial performance, analyze the effect of monitoring and control on financial performance, and examine the relationship between budgetary control and financial performance. Data on financial performance were sourced from the financial statements of the selected firms, while data on budgetary control were obtained from questionnaires administered to employees, indicating the use of both primary and secondary

data. The research approach was quantitative, and the research design was explanatory. A multi-stage sampling method was used to select the sample firms, which included Aaron's Home Removals, Secure Travel and Tours, De-Genesis Travel and Tours Limited, Grassroots Tours Ghana, Silverwhite Groopp Inc., Netlink Travel Consult, Educate Global Limited, Africa Express Travelling and Tour Agency, West Travel and Tour, and Easy Travel Consult. Data collected were analyzed using both descriptive and inferential statistical techniques through the Statistical Package for Social Sciences (SPSS) software, version 22. Multiple regression analysis revealed a positive and significant relationship between budgetary control and financial performance in the selected firms. The study concluded that better planning and control improved the financial health of small businesses in the transport industry, potentially reducing business failures and job losses. It was recommended that staff be trained in additional budgetary control techniques, such as participatory budgeting, to enhance decision-making, efficiency, and productivity. Future research was also advised to consider modeling the moderating role of financial knowledge in the relationship between budgetary control and financial performance in small businesses.

Eluzai (2019) examined the effect of budget management on financial performance in public and private universities in Juba City, South Sudan. It specifically sought to determine the relationship between budget planning, budgetary participation, and budgetary control with financial performance in Catholic University of South Sudan (CUOSS) and Juba University (JU). A descriptive comparative design was adopted, and a sample of 48 respondents was drawn from a target population of 55 using the Krejcie and Morgan table. Both qualitative and quantitative data were collected using questionnaires and analyzed through frequency counts, percentage distributions, means, standard deviations, and regression models. The findings revealed that the majority of respondents were male, possessed postgraduate education, and had between 1–3 years (at CUOSS) and over 8 years (at JU) of experience. Regression analysis showed that budget planning had a significant positive effect on financial performance at both CUOSS and JU, with associative relationships observed between the variables. The analysis indicated that budget planning explained 49 per cent of the variance in financial performance at CUOSS and 42.4 per cent at JU, suggesting that other unexamined factors contributed 51 per cent and 57.6 per cent, respectively. Budgetary participation was found to have a significant positive effect on financial performance at CUOSS but not at JU, while budgetary control had a significant effect on financial performance in both public and private universities in Juba City.

Etale and Idumesaro (2019) examined the link between budgetary control and performance with a focus on Bayelsa State of Nigeria as a case study. The study adopted actual expenditure (AEX) representing performance as the dependent variable, while capital expenditure budget (CEB) and recurrent expenditure budget (REB) were used as the independent variables. Time series data on the variables were obtained from the Budget Department of the Ministry of Budget covering the period 2007 to 2016. The type of research design adopted in the study was ex-post facto research design. Data collected was analyzed using descriptive statistics and multiple regression analysis based

the E-view version 10 computer software. Based on the findings the study concluded that the two independent variables have no statistical effect on actual budget performance. This means that there was no link between budgetary control and performance in Bayelsa State. The study recommended among others that government should encourage budgetary participation, consider resource availability in budgeting, strive to improve the state internally generated revenue, and employ qualified and highly skilled personnel in budget administration to ensure that budgetary control would bring about improved performance.

Nkya (2019) examined the effect of e-budgeting on the financial performance of lower local government authorities. A case study design was adopted, and data were collected from 47 respondents through questionnaires and interviews. The respondents included District Planning Officers (DPO), the District Executive Director (DED), and staff from the ICT department. Descriptive analysis and Varimax rotation with Keiser normalization were used to analyze the data. The findings revealed that e-budgeting in lower local government authorities was not used effectively to contribute to financial performance.

Widiawati *et al.* (2019) aimed to determine the effect of budget participation on managerial performance, with organizational commitment and job satisfaction as mediating variables. Quantitative data were collected through questionnaires distributed to 45 respondents, out of which 36 were returned and deemed suitable for analysis. The data were analyzed using Structural Equation Modeling with Partial Least Squares (PLS-SEM). The results confirmed the hypotheses, showing that high budget participation positively influenced both organizational commitment and job satisfaction. Furthermore, both organizational commitment and job satisfaction significantly influenced managerial performance. The path analysis results revealed that job satisfaction had a stronger mediating influence on managerial performance than organizational commitment.

Abongo (2018) sought to determine the effect that the budgeting process had on the financial performance of the top 100 SMEs in Kenya. Primary data were collected from SME owners and managers using semi-structured questionnaires. A descriptive technique was adopted for data analysis, utilizing measures such as standard deviations and means. The study findings were presented using figures and tables. In total, 100 questionnaires were distributed to the owners of the top 100 SME firms in Kenya, yielding a response rate of 83 per cent. The reliability statistics recorded a Cronbach's Alpha coefficient of 0.708, indicating that the questionnaire was internally consistent. The study found that budget planning, budget control, budget coordination, budget communication, and the budgetary evaluation process had all been implemented to a great extent, suggesting that the top 100 SME firms in Kenya had adopted all budgeting processes. It was concluded that there was a strong relationship ($R\text{-value} = 0.721$) between financial performance and budgeting processes, with budgeting processes accounting for 49 per cent of the total variance in the financial performance of these firms. Furthermore, the study concluded that budget planning, control, coordination, communication, and evaluation had a positive and significant effect on the financial performance of the top 100 SME firms. The study recommended that

SMEs that had not yet adopted budgeting processes should do so to enjoy the associated benefits. The study also acknowledged facing various challenges during its execution.

Agbenyo *et al.* (2018) explored the role of budgeting and its effect on the financial performance of listed manufacturing firms on the Ghana Stock Exchange as a case study. Specifically, it aimed to examine the role of budgeting and analyze its impact on the financial performance of these firms. Both cross-sectional and convenient sampling techniques were used to select fifty-one (51) respondents as the sample size. Questionnaires were administered to collect data from the respondents. A correlation matrix was employed to establish a positive relationship between budgeting and financial performance. The study discovered that budgeting played an imperative role in the financial performance of listed manufacturing firms. It also revealed a strong positive correlation between budgeting and financial performance. Furthermore, the study concluded that planning, monitoring and control, coordination, and evaluation played vital roles and had positive effects on the financial performance of manufacturing firms. The study recommended that managers should produce comprehensive budgetary plans to support the implementation of long-term strategies. It also suggested that annual budget reviews be permanently incorporated to help manufacturing firms identify key financial indicators, determine how and when to monitor them, plan for future operations, refine existing strategic plans, and respond effectively to current competition.

Nwanyanwu and Ogonnaya (2018) examined the relationship between budgetary control and financial performance of Small and Medium-sized Enterprises (SMEs) in Rivers State. From a population of 74 members of the Port Harcourt Chamber of Commerce across manufacturing, construction & engineering, and services sectors, a sample size of 63 was determined using the Taro Yamane formula. Both primary and secondary data were used, with hypothesis testing primarily relying on primary data, while secondary data played a supportive role. Management accounting practices were evaluated through budgetary control and marginal costing, while financial performance was assessed using net profit and return on equity, with technology serving as the moderating variable. The analysis employed both parametric and non-parametric techniques complementarily. The findings revealed a significant relationship at the 5 per cent level between budgetary control and financial performance, leading to the conclusion that budgetary control could drive growth and sustainability among SMEs in Rivers State. It was recommended that trade associations and private sector bodies such as the Port Harcourt Chamber of Commerce, Mines & Industries, and the Manufacturers Association of Nigeria should organize periodic sensitization workshops on the benefits of budgetary control, and that private-public-partnership-sponsored internship programs be created to provide SMEs with access to skilled manpower they might otherwise be unable to afford.

Sebastian (2018) analyzed the effects of budgeting on the financial performance of manufacturing firms in Kinondoni District, Dar es Salaam, Tanzania. A descriptive research design was adopted, and a sample of 75 respondents from selected manufacturing firms was employed. Purposive sampling was used to select seventy-five (75) managerial

staff from these firms. A self-administered questionnaire composed of closed-ended questions, open-ended questions, and five-point Likert scale items was used to collect data. The data were analyzed descriptively using SPSS version 20. The findings indicated that more formalized budget planning led to higher sales revenues. Additionally, the results revealed that formalized budgetary control led to higher profit growth for the firms. It was also found that formal budget planning and formal budgetary control exhibited different patterns in their effects on financial performance. Formal budget planning had a stronger impact on sales growth, while its impact on profit growth was weaker compared to that of formal budgetary control. The study recommended that manufacturing firms establish a strong link between the planning and control processes and the budgeting process. It also suggested that companies adopt a medium-term plan to define priorities for their daily tasks.

Kamau *et al.* (2017) assessed the effect of the budgetary process on budget performance in the public sector, focusing on state corporations in Kenya. The budgetary process was measured using variables such as budgetary participation, budgeting sophistication, budget feedback, and budgetary controls, while budget performance was evaluated through indicators like budget compliance, value for money, and budget goal achievement. A descriptive research design was employed, targeting 450 employees of Kenyatta National Hospital involved in budget preparation. A sample size of 72 respondents was determined using a statistical formula. Data were collected using questionnaires, whose content validity was reviewed by experts and reliability tested through pre-testing. Descriptive statistics were used to analyze quantitative data, while content analysis was applied to qualitative data. Correlation and regression analyses were conducted to assess the relationship between budgetary processes and budget performance. The findings showed that budgetary participation significantly influenced budget performance, with budgeting sophistication also having a notable effect. The study concluded that budgetary participation had the greatest impact, followed by budgetary control, then budget feedback, while budgeting sophistication had the least effect.

Almasi *et al.* (2015) studied the effects of participation of managers in budgeting on their management performance in the Tehran Regional Electricity Company. It focused on variables such as participation in budgeting, managerial performance, adequacy of funding and resource allocation, job satisfaction, organizational commitment, and organizational trust. Conducted as a survey, the research targeted all 34 middle-level managers of the company as per the 2012 organizational chart. A questionnaire served as the research instrument, and the data were analyzed using SPSS and SmartPLS. The results revealed significant correlations between managers' participation in budgeting and variables such as organizational trust, adequacy of funding and resource allocation, and job satisfaction. Additionally, organizational trust was significantly linked to organizational commitment, which in turn was associated with competence in funding absorption and optimal resource allocation. These competencies, along with job satisfaction, were found to significantly influence managerial performance.

Mohamed *et al.* (2015) examined how budgetary control influences the performance of Dara-salaam Bank, with

specific objectives to assess the impact of responsibility accounting, variance cost analysis, and zero-based budgeting on organizational performance. It was anchored on the theory of budgeting, budgetary control theory, and accounting theory, and the empirical review aligned with these objectives. The research adopted descriptive and retrospective designs and relied on both primary and secondary data. Primary data were gathered through questionnaires, while secondary data came from published sources. A census of all 70 staff members of Dara-salaam Bank in Hargeisa, Somaliland, was conducted. Ethical considerations were upheld by maintaining respondent confidentiality and clearly communicating the purpose of the research. Data entered into Excel were presented using frequency tables and analyzed with SPSS, with results shown in tables and charts. The findings revealed that responsibility accounting, variance analysis, and zero-based budgeting significantly enhanced budget control, efficiency, and productivity. It was also found that while variance cost analysis alone might not directly influence organizational performance, it supports decision-making processes that ultimately impact performance.

3. Methodology of the Research

3.1 Research Design

Survey research design was used in this study. The design typically involves the researcher collecting information or data from respondents within a target population concerning

variables of interest to the researcher. The information sourced are their opinions as regarding budgetary control and operational performance of the breweries under study. The choice of the survey research design is to allow respondents to share their opinion with mere candid and valid answers to the research enquiry.

3.2 Population of the Study

Based on information obtained from the Nigerian Directory website, there were four brewing firms operating within the South-South region of Nigeria. The target population for this study was 103 employees currently engaged in these four companies. This number was not all the employees in these organizations but comprised of individuals who are directly involved in budgetary activities as well as planning operations in the selected organizations.

3.3 Sample Size and Sample size Determination

Since the needed respondents for the questionnaire of this study were individuals deemed to be typically involved managerial staff across various departments, including finance, production, sales and marketing, procurement, and human resources; identified across the 4 brewing firms in South-South Nigeria: all 103 employees highlighted in the population constituted the sample size for this study. These firms and number of managerial staff selected are presented in table 3.1 below.

Table 3.1: Number of respondents across sampled breweries

S. No	Name of Brewery	State	No. of Staff	Address
1	Champion Breweries	Akwa Ibom State	32	Industrial layout, Aka Offot, Uyo, Akwa Ibom State
2	Bendel Brewery Ltd.	Edo State	29	Benin-Asaba Road, Oregbeni Estate, Benin City, Edo state
3	Bendel Breweries Ltd.	Edo State	24	Benin-Agbor Road, Benin, Edo State
4	Pabod Breweries Ltd.	Rivers State	18	186/187 Tans Amadi Industrial layout, Port Harcourt, rivers state.
	Total		103	

Source: Researcher's compilation (2025)

3.4 Sampling Technique

Census sampling technique was employed. This implies that the researcher worked with the entire population instead of a subset or part of it. This technique was used because the population of 103 managerial staff was a small or homogenous set already. As such, there was no need to further cut it, so as to capture sufficient and diverse perspectives on the subject matter.

3.5 Sources of Data and Method of Data Collection

The study adopted primary source of data collection with the aid of a well-structured questionnaire to obtain data from the sampled respondents. This involved a survey questionnaire created and administered to respondents. The questionnaires were shared for three weeks across the researcher's contacts and targeted individuals in the sampled breweries. A replica of the questionnaire in printed form is as attached in Appendix 1.

3.6 Reliability of the Instrument

To test for reliability of the research instrument, the Cronbach alpha was used as reliability parameter to determine the internal consistency of all the items in the research instrument. The use of the Cronbach alpha is deemed appropriate in testing for reliability of multiple Likert questions in a survey questionnaire that form a scale

to determine if the scale is reliable. The acceptable threshold of the result coefficient for the items is 0.6 and above. The output is presented below:

Cronbach's Alpha	N of Items
.884	24

Source: Researcher's computation (2025)

From the result above, the research instrument was proven reliable (Cronbach's Alpha was 0.884, greater than the threshold; 0.6).

3.7 Validity of the Research Instrument

The researcher's supervisor and other accounting experts validated the self-structured questionnaire. They also ascertained the applicability of each item on the research instrument to the study's objectives. When creating the final copies of the questionnaire, the researcher adopted the recommendations and modifications made.

3.8 Model Specification and Variable Measurement

The model for this study was adopted from the work of Nwanyanwu and Ogbonnaya (2018) and modified to suit this study. The econometric function of the model is given below:

Financial performance = f (budgetary control)

Cost efficiency = f (budget flexibility, performance evaluation, variance analysis, participatory budgeting, budgeting procedure compliance)

$$\text{CEFF} = f(\text{FLEX}, \text{EVAL}, \text{VARA}, \text{PATB}, \text{BPCO})$$

$$\text{CEFF} = \alpha_0 + \beta_1 \text{FLEX} + \beta_2 \text{EVAL} + \beta_3 \text{VARA} + \beta_4 \text{PATB} + \beta_5 \text{BPCO} + \varepsilon \quad (1)$$

Where:

- CEFF = Cost efficiency
 FLEX = Budget flexibility
 EVAL = Performance evaluation
 VARA = Variance analysis
 PATB = Participatory budgeting
 BPCO = Budgeting procedure compliance
 α_0 = Model intercept
 β_{1-5} = Coefficient to be estimated, where $\beta_{1-5} > 0$
 ε = Stochastic error term

3.9 Measurement/Operationalization of Variables

Variable	Measurement	Sources	Apriori Expectation
Cost efficiency (Dependent variable)	Transformed from responses gathered from field survey	Nkpodot and Emenyi (2023)	
Budget flexibility (Independent variable)	Transformed from responses gathered from field survey	Naz <i>et al.</i> (2024)	+ve
Performance evaluation (Independent variable)	Transformed from responses gathered from field survey	Simidi <i>et al.</i> (2021); Abongo (2018)	+ve
Variance analysis (Independent variable)	Transformed from responses gathered from field survey	Simidi <i>et al.</i> (2021)	+ve
Participatory budgeting (Independent variable)	Transformed from responses gathered from field survey	Eluzai (2019)	+ve
Budgetary procedure compliance (Independent variable)	Transformed from responses gathered from field survey	Bergmann <i>et al.</i> (2020)	+ve

Source: Researcher's compilation (2025)

3.10 Method of Data Analysis

In the assessment of budgetary control and operational performance of breweries in South-South Nigeria, ordinary least square regression analysis will be used in analysing the data and SPSS 21 was the statistical package used to analyse the data of this study.

3.11 Decision Rule

The decision rule that used in this study is stated thus; Reject the null hypotheses if the probability value (p-value) is less than 0.05 ($p < 0.05$). Alternatively, accept the null hypotheses if the probability value (p-value) is greater than 0.05 ($p > 0.05$). This can be stated symbolically as:

Accept H_0 if $P_c < P_t$

Reject H_0 if $P_c > P_t$

All analyses will be conducted at 95 per cent level of confidence that is 0.05 level of significance.

4. Data Presentation, Analysis and Discussion of Findings

This chapter presented the data collected for this study, the statistical analyses of the data, hypotheses testing, as well as discussion of the findings.

4.1 Data Presentation

The questionnaire was sent and administered to the sampled respondents and the summary is as shown in table 4.1 below;

Table 4.1: Summary of questionnaires administered

Questionnaires	Number of questionnaires	Percentage (%)
Administered	103	103.00
Filled out	96	93.20
Not filled accurately	7	6.80
Total	103	103.00

Source: Researcher's computation (2025)

Table 4.1 above shows that a total of 103 questionnaires were sent out to the sampled respondents in the breweries involved. Out of the administered questionnaires, 96(93.20 per cent) were correctly filled, while 7(6.60 per cent) were not completed or were not correctly filled and so, they were scrapped.

4.2 Data Analysis

4.2.1 Analysis of Demography of Respondents

Table 4.2: Position held

		Frequency	Percent %	Valid Percent %	Cumulative Percent %
Valid	Finance manager	22	22.92	22.92	22.92
	Production manager	18	18.75	18.75	41.67
	Sales and marketing	17	17.71	17.71	59.38
	Operations manager	15	15.63	15.63	75.01
	Procurement manager	13	13.54	13.54	88.55
	Human resources manager	11	11.46	11.46	100.00
	Total	96	100.0	100.0	

Source: Researcher's computation (2025)

From table 4.2 above, the distribution of the 96 respondents across the various departments in question shows that the finance department had the highest representation, with 22 managers or respondents, constituting 22.92 per cent of the total. Second place were the production managers. In number, they were 18, making up for 18.75 per cent of the total number of respondents. It was also observed that 15 operations managers were captured and they made up for 15.63 per cent of the total number of respondents. From the table, the research also captured the views of 13 procurement managers which was 13.54 per cent of the total sample. Lastly, 11 human resources managers were captured, making up for 11.46 per cent of the study's sample. From these, it was observed that majority of the sampled respondents were from the finance department.

Table 4.3: Age of respondents

		Frequency	Percent %	Valid Percent %	Cumulative Percent %
Valid	20-30	24	25.00	25.00	25.00
	31-40	35	36.46	36.46	61.46
	41-50	21	21.88	21.88	83.33
	51 and above	16	16.67	16.67	100.0
	Total	96	100.0	100.0	

Source: Researcher's computation (2025)

From table 4.3 above, it was observed that 24 of the respondents which comprised 25 per cent were between 20-30 years old, 35, which was 36.46 per cent were between age 31-40. Respondents between 41-50 years old were 21 in number, making up 21.88 per cent and lastly, 16 respondents (16.67 per cent) aged from 51 years and above. This table summarizes that most of the respondents for this study were relatively middle aged as the 31-50 group was majority.

Table 4.4: Years of working experience

		Frequency	Percent %	Valid Percent %	Cumulative Percent %
Valid	Below 5 years	22	22.92	22.92	22.92
	5-10 years	30	31.25	31.25	54.17
	11-15	25	26.04	26.04	80.21
	16 years and above	19	19.79	19.79	100.0
	Total	96	100.0	100.0	

Source: Researcher's computation (2025)

From the computation in table 4.4 presented above, 22 of the respondents constituting about 22.92 per cent had less than 5 years of working experience in their line of work; 30(31.25 per cent) of the respondents had about 5-10 years of working experience; 25(26.04 per cent) had between 11-15 years of working experience in that line of work; and 19(19.79 per cent) of them had more than 15 years of working experience in their line or work. From these, we can see that majority of the respondents had between 5-10 years of experience of working for or in a pharmacy.

Table 4.5: Highest educational qualification

		Frequency	Percent %	Valid Percent %	Cumulative Percent %
Valid	ND/NCE	18	18.75	18.75	18.75
	HND/B.Sc	46	47.92	47.92	66.67
	M.Sc and above	22	33.33	33.33	100.0
	Total	96	100.0	100.0	

Source: Researcher's computation (2025)

From the output in table 4.5 above, 18(18.75 per cent) were OND/NCE holders, 46(47.92 per cent) were HND/B.Sc holders and 22(33.33 per cent) had M.Sc. and above for their qualifications. This connotes that majority of the sampled respondents were HND/B.Sc. holders.

4.2.2 Regression Analysis

Table 4.6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.806 ^a	.649	.629	3.1793	2.217

a. Predictors: (Constant), FLEX, EVAL, VARA, PATB, BPCO

b. Dependent Variable: CEFF

Source: Researcher's computation (2025)

Table 4.7: Analysis of variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	29.335	5	0.917	8.423	.000 ^b
Residual	114.489	90	0.726		
Total	143.824	95			

a. Dependent Variable: CEFF

b. Predictors: (Constant), FLEX, EVAL, VARA, PATB, BPCO

Source: Researcher's computation (2025)

Table 4.8: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9.127		3.1793	.000		
	FLEX	.505	.216	.496	2.913	.000	.823
	EVAL	.712	.167	.699	3.928	.000	.783
	VARA	.134	.182	.121	1.217	.112	.989
	PATB	.698	.179	.676	3.022	.000	.888
	BPCO	.276	.180	.261	1.514	.183	.941

a. Dependent Variable: CEFF

Source: Researcher's computation (2025)

Table 4.6, 4.7 and 4.8 above represent the results obtained from the regression analysis for this study. The model summary indicated that the pooled OLS regression had an R-squared value of 0.649. This implies that the independent variables of the study could explain approximately 65 per cent of the systematic variations in the operational performance of the selected breweries in South-South Nigeria. However, the unexplained part (35 per cent) could be attributed to other variables not captured in the model but captured in the error term. Also, the result of the F-statistics (8.423) in the ANOVA with associated p-value of 0.000 indicated that the independent variables (proxies of budgetary control) have a statistically significant effect on the dependent variable (operational performance) of the sampled breweries.

4.3 Test of Hypotheses

4.3.1 Hypothesis One

H₀₁: Budget flexibility has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

H₁₁: Budget flexibility has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

According to the results from table 4.8, it was observed that the effect of budget flexibility on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.496 and a probability value of 0.000. The p-value was

statistically significant at the 5 per cent level of significance, and as such, the null hypothesis was rejected and the alternate accepted. Thus, it was concluded that budget flexibility has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

4.3.2 Hypothesis Two

H₀₂: Performance evaluation has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

H₁₂: Performance evaluation has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

According to the results from table 4.8, it was observed that the effect of performance evaluation on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.699 and a probability value of 0.000. The p-value was statistically significant at the 5 per cent level of significance, and as such, the null hypothesis was rejected and the alternate accepted. Thus, it was concluded that performance evaluation has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

4.3.3 Hypothesis Three

H₀₃: Variance analysis has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

H₁₃: Variance analysis has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

According to the results from table 4.8, it was observed that the effect of variance analysis on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.121 and a probability value of 0.112. The p-value was statistically non-significant at the 5 per cent level of significance, and as such, the null hypothesis was accepted and the alternate rejected. Thus, it was concluded that variance analysis has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

4.3.4 Hypothesis Four

H₀₄: Participatory budgeting has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

H₁₄: Participatory budgeting has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

According to the results from table 4.8, it was observed that the effect of participatory budgeting on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.676 and a probability value of 0.000. The p-value was statistically significant at the 5 per cent level of significance, and as such, the null hypothesis was rejected and the alternate accepted. Thus, it was concluded that participatory budgeting has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

4.3.5 Hypothesis Five

H₀₅: Budgeting procedure compliance has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

H₁₅: Budgeting procedure compliance has a significant effect on cost efficiency of selected breweries in South-South Nigeria.

According to the results from table 4.8, it was observed that the effect of budgeting procedure compliance on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.261 and a probability value of 0.183. The p-value was statistically non-significant at the 5 per cent level of significance, and as such, the null hypothesis was accepted and the alternate rejected. Thus, it was concluded that budgeting procedure compliance has no significant effect on cost efficiency of selected breweries in South-South Nigeria.

4.4 Discussion of Findings

4.4.1 Budget Flexibility and Cost Efficiency

According to the results from table 4.8, it was observed that the effect of budget flexibility on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.496 and a probability value of 0.000. The p-value was statistically significant at the 5 per cent level of significance, and as such, it was concluded that budget flexibility has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This means that the more flexible the budget of these breweries, the higher their cost efficiency. This is a relationship in the same direction. In other words, the higher the degree of flexibility of budgets, the more efficient cost would be. In a simpler way, when these breweries have more room to adjust their budgets for example, reallocating funds when needed or responding quickly to unexpected changes, they eventually get better at controlling and reducing costs.

In support of the last paragraph, according to Hugar and Kles (2022), flexible budget, in its most basic version, adjusts some expenses based on revenue levels by using percentages instead of fixed amounts; which enables unlimited number of adjustments to be made to anticipated costs that are directly related to actual income received. They further added that this type of budget enables managers to prepare themselves regardless of the outcome by allowing them to account for both low and high output. Many benefits have been attached to flexible budgets in past literature. Zhang *et al.* (2020) mentioned that having flexibility in the budget gives organizations the ability to adapt to unexpected changes, like shifts in market conditions or operational needs. They also added that flexible budgets can make it easier to allocate resources where they're most needed, reduce waste, and ultimately improve cost efficiency.

Zhang *et al.* (2020) linked it to the concept of financial flexibility, further emphasizing that it helps to avoid the expenses that come with unfavourable circumstances. Islam *et al.* (2020) added that this financial flexibility enhances a company's resilience and adaptability by managing the changing business environment and opting for profitable investment opportunities. This study's finding aligns with all these and further aligns with empirical studies like that of Ali and Siddiqui (2020) which established that financially flexible companies exhibit stable and superior financial performance as compared to other firms. It is also in line with the finding of Nwanyanwu and Ogbonnaya (2018) which was that marginal costing and budgetary control practices of SMEs in Rivers State to be significant in associating positively with their net profits and returns on equity respectively. Marginal costing is a popular concept in flexible budgets.

4.4.2 Performance Evaluation and Cost Efficiency

According to the results from table 4.8, it was observed that the effect of performance evaluation on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.699 and a probability value of 0.000. The p-value was statistically significant at the 5 per cent level of significance, and as such, it was concluded that performance evaluation has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This positive effect shows that when these breweries carry out performance evaluation, their activities or operations tend to be more cost-efficient. In other words, when these breweries

regularly assess how well employees, departments, or processes are performing, they are better able to identify inefficiencies, reduce waste, and manage resources effectively and by these, cost efficiency could be enhanced. That should come naturally when “inefficiencies” are cleared.

When it comes to budgeting, planning, or forecasting, Frezatti *et al.* (2022) argued that the quality of organizational processes can be judged by how accurate they are. The accuracy needed here is fundamental, and plays a central role in guiding management decisions and enhancing an organization's overall performance. This judgement, is what is called performance evaluation. Performance evaluation comes as a result of functioning of different components or let's say departments or divisions in the organization. It is expected that the different parts that make up the organization are functioning properly (Ogiedu *et al.*, 2009). This idea gives room for everyone in the organization to make their own evaluations and not just by one final judge (top management). Performance evaluation could be carried out at various firm departments. Egbunike and Unamma, (2017) stressed that performance evaluation is pivotal to an organization as it helps determine whether the implemented budget and budgetary control measures have successfully achieved their intended outcomes within a given time frame.

As mentioned earlier, regular performance assessments, including budgetary evaluations, can help organizations spot inefficiencies, measure employee productivity, and ensure that departmental efforts align with overall financial goals (Pimpong & Laryea, 2016). This alignment often results in improved resource management and cost efficiency. Koech, (2015) argued that when teams are held accountable and outcomes are consistently monitored, there tends to be a stronger focus on value-adding activities and responsible financial behaviour. This study's finding is mostly in tandem with the empirical finding of Gilbert Mutai Koech (2015) who evaluated the financial performance of several manufacturing businesses in Kenya using budgetary review. His results demonstrated that there is a substantial positive link between budgetary review and manufacturing businesses' financial success. Similarly, Pimpong and Laryea (2016) showed that budgetary evaluation has a positive impact on business performance.

4.4.3 Variance Analysis and Cost Efficiency

According to the results from table 4.8, it was observed that the effect of variance analysis on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.121 and a probability value of 0.112. The p-value was statistically non-significant at the 5 per cent level of significance, and as such, the variance analysis has no significant effect on cost efficiency of selected breweries in South-South Nigeria. Actually, variance analysis has an insignificant positive effect on cost efficiency of the studied breweries, but the evidence to support this was not strong enough as shown in the probability value. This finding suggests that while variance analysis may be contributing a little to cost efficiency, there might be other factors which significantly contribute to the cost efficiency such that variance analysis becomes insignificant.

Despite the finding, variance analysis still helps management trace the source of any deviations and hold the appropriate individuals accountable, whether performance falls short or goes beyond the expected standard. This view

was from Arora (2006). Oluwayemisi *et al.* (2024) also pointed out that variances are a normal part of budgeting, stating that actual outcomes rarely match the standard figures, even when those standards are realistic. This view could give the impression for this study's finding. In my opinion, since it is already a normal part of budgeting, its effect may not be noticed by the respondents like those of performance evaluations and flexible budgeting. An instance for this insignificant relationship could also be lack of data. Variance analysis undoubtedly, is solely dependent on data availability. This idea was also present in Lescrauwaet *et al.* (2022) who stated that the effectiveness of variance analysis heavily depends on the accuracy and reliability of the data used and it was cited that when there are issues in how data is collected, processed, or interpreted, the resulting variance reports can be misleading or say, insignificant.

This study's finding is in contrary with many past findings. Its contrary to Muhammad *et al.* (2022) who revealed that labour variance has positive significant effect on organizational performance; implying that variance analysis has a significant positive relationship with performance. The finding is not contrary to Ali-Momoh *et al.* (2022) who concluded that variance analysis has a significant positive statistical link with the financial performance of listed consumer goods firms in Nigeria. Contrary finding also included Adu-Gyamfi and Chipwere (2020) who stated that cost analysis has a favourable and statistically significant effect on the financial standing of the companies they studied.

4.4.5 Participatory Budgeting and Cost Efficiency

According to the results from table 4.8, it was observed that the effect of participatory budgeting on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.676 and a probability value of 0.000. The p-value was statistically significant at the 5 per cent level of significance, and as such, it was concluded that participatory budgeting has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that the more participative budgeting is in these breweries, the higher the cost efficiency. This shows that when the studied breweries practice participatory budgeting, they become more cost efficient in their operations bearing in mind that participatory budgeting is a budgeting approach that gives room for managers who will be responsible for the budget performance, to take active part in the development of the budget.

As emphasize in the literature in line with Dharmanegara *et al.* (2016), the whole idea of budget participation is such that individuals in an organization are involved, and have influence in regulating budgets that directly applies to them. Pakpahan and Augustine (2019) made emphasis on the advantages of participatory budgeting with the first being that the objective of the budget will be easily accepted if the budget is under the supervision of managers and the second being that it would foster effective information exchanges between organizational participants. Chong *et al.* (2005) stressed that participatory budgeting brings about employee motivation. In the literature, things like job satisfaction and employee commitment were also cited to be potential benefits of participatory budgeting. This study's finding is in line with Eluzai (2019) who found that budgetary participation has a strong positive impact on financial performance. From a practical standpoint, it only makes sense to believe that when employees are actively involved

in the budgeting process, they are more likely to comply with it. Similarly, Mohd Noor and Othman (2012) revealed that budgetary participation can improve managerial performance by boosting commitment to organizational goals. This was in line with the finding as well.

4.4.6 Budgeting Procedure Compliance and Cost Efficiency

According to the results from table 4.8, it was observed that the effect of budgeting procedure compliance on cost efficiency of selected breweries in South-South Nigeria presented a coefficient of 0.261 and a probability value of 0.183. The p-value was statistically non-significant at the 5 per cent level of significance, and as such, it was concluded that budgeting procedure compliance has no significant effect on cost efficiency of selected breweries in South-South Nigeria. In essence, budgeting procedure compliance has an insignificant positive effect on cost efficiency. The positive effect implies that increase in compliance in the budgeting procedure causes a little increase or variation in cost efficiency. As said, this effect was of little to no significance because of the probability value. Certainly, other factors come into play when cost efficiency is the case in these breweries, but compliance was of little significant.

Even if the study found an insignificant result, following procedures is paramount. According to Fiveable (2024), proper budgeting procedures are essential for effective fund management. Fiveable further stressed that failure to follow due process can lead to consequences such as sanctions, funding cuts, or reputational damage. This study's finding was contrary to that of Kindström and Kowalkowski (2014) who found that structured approaches tend to support cost-efficient actions, boost profitability, and enhance overall productivity. It is also contrary to Bergmann *et al.* (2020) who found that when organizations give importance to their budgeting functions and adhere to structured processes like business analytics integration, they tend to be more satisfied with their budgeting outcomes.

5. Summary, Conclusion and Recommendations

5.1 Summary of Findings

This study examined the effect of budgetary control tools on operational performance of selected breweries in South-South Nigeria. The independent variable; budgetary control tools was proxied by budget flexibility, performance evaluation, variance analysis, participatory budget, and budgeting procedure compliance and the dependent variable; operational performance was proxied by cost efficiency. The empirical findings derived from this research were as follows:

1. Budget flexibility {0.496(0.000)} has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that more flexible the budget is, the more efficient the costs for these breweries.
2. Performance evaluation {0.699(0.000)} has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that frequent performance evaluations bring about cost efficiency for the sampled breweries.
3. Variance analysis {0.121(0.112)} has a non-significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that variance analysis has no effect on cost efficiency of the studied breweries.

4. Participatory budgeting {0.676(0.000)} has a significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that inclusive budgeting exercises lead to cost efficiency for the breweries under study.
5. Budgeting procedure compliance {0.261(0.183)} has a non-significant positive effect on cost efficiency of selected breweries in South-South Nigeria. This implies that budgeting procedure compliance has no effect on cost efficiency of the studied breweries.

5.2 Conclusion

This study scrutinized the effect of budgetary control tools; specifically, budget flexibility, performance evaluation, variance analysis, participatory budget, and budgeting procedure compliance on operational performance of selected breweries in South-South Nigeria. Extracting views from multiple theories including the contingency, alpha and beta, and goal setting theories, the study took cost efficiency as proxy for operational performance. The findings showed that while, budget flexibility, performance evaluation and participatory budget significantly affected cost efficiency positively, variance analysis and budgeting procedure compliance had no significant effect on cost efficiency of selected breweries in South-South Nigeria. As such, the study concluded that budgetary control tools have significant effect on operational performance of selected breweries in South-South Nigeria. The overall effect was said to be positive.

These outcomes reemphasize the importance of budgetary control in any given organization. The findings were deemed to align the various theories. First, the contingency theory, which holds that management practices such as budgeting must be tailored to fit the specific organization involved. Take for instance, the positive effect of budget flexibility and participatory budgeting. They emphasize that breweries that adapt their budgeting processes to the dynamic nature of their operations perform better. This is the sole idea of no one-size-fits-all approach to budgeting. In the same vein, the positive effect of performance evaluation resonates with the goal setting theory. The goal setting theory as explained earlier, emphasizes the role of clear goals and feedback in improving performance. It basically points out how structured evaluations can enhance accountability and cost management. Also, the results obtained also reflect the alpha and beta theory, especially in how variance analysis and procedure compliance, did not significantly affect cost efficiency. This scenario depicts that not all conventional budgeting tools automatically contribute to operational performance, still reinforcing the idea that budgeting approaches should be continuously tailored to be in line with given organization.

5.3 Recommendations

In line with the findings, the study made the following recommendations:

1. Management of the studied breweries should prioritize the adoption of flexible budgeting to accommodate operational changes as it was proven to increase cost efficiency.
2. Regular and consistent performance evaluation mechanisms should be put in place to track progress and enhance cost control. This was shown to significantly increase cost efficiency.

3. Breweries should not ignore the significance of variance analysis even if the finding was not a significant one. Rather, it could be improved maybe in terms of timeliness or frequency.
4. Breweries should reinforce participatory budgeting through the involvement of key Personnel in budget formulation. This was shown to boost ownership and commitment as well as cost efficiency.
5. Compliance with budgeting procedures should be complemented with effective monitoring and review systems. These monitoring systems could help scrutinize procedures to ensure the procedures align with cost efficiency goals.

5.4 Contribution to Knowledge

1. This study used cost efficiency to measure operational performance. It introduced a fresh perspective beyond traditional financial indicators like ROA and ROE.
2. This study decomposed budgetary control into five proxies, with emphasis on underexplored components such as budget flexibility and performance evaluation.
3. This study filled a geographical gap by focusing on breweries in South-South Nigeria. Past studies done in Nigeria did not focus on particular zones but Nigeria as a whole.
4. This study made use of primary data and thus, offers suggestions gotten through the direct words of interviewed professionals in the course of the study.
5. This study is also recent or current because it uses 2025 data. This implies that it factors in, any changes that have occurred in recent years. To add to this, this study contributes by offering findings from specific industry like breweries unlike other studies which generalized these things.

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