

**EFFECT OF MANAGEMENT ACCOUNTING PRACTICES ON THE  
FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA.**

**BY**

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**DECLARATION**

This research project is my original work and has not been submitted for examination in any other university

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This research for project has been submitted for examination with my approval as the university supervisor

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## **DEDICATION**

I hereby dedicate this research project to my family for their support and guidance in my academic journey.

## **ACKNOWLEDGMENT**

Firstly, am thankful to the good Lord for gifting me hale health and the mental strength required to undertake this study. I also acknowledge the university lecturers for their guidance in undertaking the course work as well as this study. Special acknowledgement to my project supervisor Dr. Herick Ondigo; his support and criticism of my work. Finally, am forever grateful to my immediate family and friends for their consistent encouragement and support.

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## ABSTRACT

Management accounting has always been a critical element of the management function as enhances quality of decision making. The research purpose entailed explanation of the impact of management accounting practices on the financial performance of Kenyan licenced and operative commercial banks. The research had costing system, budgeting, evaluating performance, decision making information and strategic analysis as independent variables and return on assets as the dependent variable. The contingency theory was the anchor theory and it highlighted the lack of uniformity in applying management accounting practices across organizations. The contingency theory was relevant to the study as it demonstrated the dynamic nature of MA practices across the commercial banking industry in Kenya. The theory also proposed specific factors that management teams must consider in deciding the appropriate management accounting practices suitable for their operations. The study population of this study consisted of all commercial banks operative in Kenya as of September 2020. The study used a descriptive and a cross-sectional study design and relied on primary data. Descriptive statistics and inferential statistics were the mode of statistics. 38.1% of the variations in ROA, the dependent variable was explained by MA practices which formed the study's independent variables. The results also showed that the standard error of estimate is 0.374 hence showing that there is little variation and thus the correlation will be almost perfect. Return on assets had a weak and negative correlation with performance evaluation, strategic analysis and information for decision making but showed a weak and positive correlation with costing system and budgeting. The study found out an insignificant positive relationship between return on assets and costing system whereas there was a minor positive relationship between ROA and budgeting. The findings also found out that performance evaluation had a minor negative relationship with ROA. Further the table shows that information for decision making had a negative relationship with ROA. The findings further showed that strategic analysis has a negative relationship with ROA. The study came to a conclusion that costing system and budgeting practices in banks have a positive effect on ROA among banks in Kenya. However, the research recommended that bank managements should be wary about these Management accounting practices fluctuations as it could affect bank ROA. The researcher recommended that bank managements should have policies on how to reduce these fluctuations and finally the researcher recommended that more research is done involving all other management accounting practices and how they affect ROA.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

According to Johnson and Kaplan (1986) management accounting refers to an internal information system that processes accounting processes for use by business managers. Management accounting is a critical element of the management function as it enhances quality of decision making. Management accounting prior to the mid-20<sup>th</sup> century was viewed as methodical activity required to achieve a firm's objectives (Johnson & Kaplan, 1987). The focus was predominantly on product cost. The documentation of management accounting systems appears in the early nineteenth century underlining its extensive use in management. Liaqat (2006) reports that in the 1970s the focus on management accounting begun to shift with provision of information for planning and control functions gaining more interest (Liaqat, 2006).

Abdel-Kader and Luthar (2006) also observed that management accounting during 1970s was oriented towards the manufacturing sector and the internal administration function. The two researchers further pointed out that management accounting (MA) practices in the 1970s was reactive only identifying problems and gaps when deviations from the plans arose (Abdel-Kader & Luther, 2006). The 1980s global business environment was experiencing increased competition and higher frequency of shocks. The management accounting focus shifted to waste reduction of resources used to support business processes. In the 1990s, the internet created new uncertainties and existence threats for business entities. Focus shifted to creating value by using resources in an effective manner. Firms embraced target costing, balance score card, economic value added, activity based management, strategic management accounting as critical management accounting techniques to support their operations.

Several researchers have conducted studies on the bearing of management accounting in a business entity's performance with most revealing the positive influence of the practice. Ittner and Larcker (2001) observed that MA practices offered an information system that enhanced quality of decision making (Ittner & Larcker, 2001). Nuhu, Baird and Appuhami (2016) also observed that embracing MA practices enabled firms to respond to external environmental changes in a timely manner (Nuhu, Baird,

& Appuhami, 2016). Axelsson, Laage-Hellman and Nilsson (2002) revealed that adopting MA practices promoted intended employee behaviour (Axelsson, Laage-Hellman, & Nilsson, 2002). Stein (2017) argued that management accounting enables firms to detect business risks and provide management with an ideal strategy to manage the risks identified (Stein, 2017).

Over the past decade, commercial banks in Kenya have witnessed significant growth in revenues and profits. The improved performance has also been reflected by the increasing interest by foreign banks in the Kenyan banking sector. Recent changes in the law regulating the banking sector were projected to result to losses for commercial banks. However, despite the capping of interest rates, commercial banks have continued to report massive profits (Mwaniki, 2018). A majority of studies on the Kenyan banking sector have focused on profitability, management structure, and customer engagement. There is need to evaluate the internal operations of banks to understand their contribution to their financial performance. The study aimed to plug the gap by analysing the MA practices embraced by commercial banks in Kenya.

In ascertaining the empirical interrelationships between MA practices and financial performance, a conceptual model premised on the literature reviewed was developed. The predictor variable was MA practices while the outcome was the Kenyan commercial banks' financial performance operating in Kenya as of September 2020.

### **1.1.1 Management Accounting Practices**

Burns, Quinn, Warren and Oliveira (2013) define management accounting as the continuous provision of financial and non-financial information to decision-makers in a firm (Burns, Warren, Quinn, & Oliveira, 2013). The Institute of Management Accountants (2008) define MA as the progression of decision making that involves the planning function, management of performance and the provision of expertise in financial reporting and control that enables an organization achieve its objectives. Johnson and his colleague pointed out that the management accounting practices extended into three core areas; performance management, strategic management, and risk management (Johnson & Kaplan, 1987).

Strategic MA practices advance the strategic role of the practices in enabling an organization achieve its objectives. Performance management practices enable management teams assess processes and productivities with a view of comparing

them with targets. Risk management practices enable management teams to develop frameworks and practices to aid in identification, measurement, management, and reporting of risks to the achievement of the organization's objectives. Ward (2012) observes that management accounting remains largely unexploited as an ideal approach to accounting for creation of competitive advantage. Ward further argues that MA practices differ from financial accounting as it solely focuses on providing managers with the necessary information required to make day to day decisions (Ward, 2012).

Adopting management accounting in an organization requires unique skills that the management team must possess to ensure successful implementation. Firms that benefit from management accounting establish systems that recognize, assess, scrutinize, and translate their processes into valuable information that decision makers use. Thompson, Strickland and Gamble (2009) pointed out that common MA practices include activity-based costing (ABC), variance analysis, total-quality management (TQM), budgeting, strategic analysis, advice for decision making, balance score card among many others (Thompas, Strickland, & Gamble, 2009).

Stein (2017) argues that MA practices are a critical determinant of performance. Management rely on the practices to make decisions that ensure processes in a firm are profitable, sustainable and align within set standards. The current global business environment provides a robust empirical backing for the link between MA practices and performance owing to the increase in business complexity and increased use of non-financial information in aiding decision makers. In their study, (Baines & Langfield-Smith, 2003) observed that firms which greatly relied on non-financial accounting information recorded an improvement in performance (Baines & Langfield-Smith, 2003).

Chenhall and Langfield-Smith (1998) argued that firms which embraced advanced MA practices such as benchmarking, ABC, TQM, and strategic management accounting recorded improved performance. MA practices not only improved performance of product based firms but the service industry as well (Chenhall & Langfield-Smith, 1998). Mia (2000) observed that hotels which embraced management accounting systems recorded an improvement in both their financial and non-financial performance (Mia, 2000).

### **1.1.2 Financial Performance**

Kaplan and Norton (1992) define performance as the extent to which organizations utilize their resources efficiently and effectively to achieve desired objectives after implementing their plans. Positive performance is realized when firms achieve desired targets as outlined by the various stakeholders. By assessing performance, one can determine growth over a period over a period of time (Kaplan & Norton, 1992). Investors base their decisions on performance both financial and non-financial.

Striteska and Spickova (2012) reveal that determining performance is a critical internal process as it attracts external competency for organizations with desirable capabilities (Striteska & Spickova, 2012). By combining external competencies with internal competencies, firms are able to distinguish themselves in the market. Goh (2004) observes that measuring performance ought to consider both financial and non-financial indicators (Goh, 2004). By considering the two approaches, firms can holistically assess performance to ensure set targets provide sustainable growth.

Financial performance, a subset of organizational performance, evaluates the magnitude to which an entity's financial goals are being met. Financial performance is an ongoing process that assesses the results and progress of an entity's policies and activities in money terms. Stakeholders rely on financial performance to assess the financial health of an organization over a period time and also enables an analysis of similar firms in a given industries or comparing industries and sectors in aggregation (Hofer, 1983). In conducting a financial performance analysis, stakeholders use financial statements that reveal an organized collection of data in a logical and consistent manner as outlined by accounting procedures.

The major indicators of financial performance are the income statement, statement of financial position, and statement of cash flow. The notes provided in preparing the three statements are also a critical part of financial performance information. Metcalf and Titard (1996) argued that information revealed by financial statements does not fully explain or highlight all the financial operations of an organization (Metcalf & Titard, 1996). However, relying on financial statements provides valuable information on profitability and financial stability of firm. The essence of financial performance analysis is, therefore, to determine profitability and a firm's financial soundness.

Metcalf and Titard (1996) pointed out that financial performance analysis entails four key perspectives; profitability, working capital activity, and financial structure analysis. Financial performance analysis is also classified into different categories depending on financial instruments assessed as well as the process of analysis. An external analysis enables one to compare financial performance across firms in similar industries while an internal analysis allows a comparison within departments in a firm. A horizontal analysis enables a comparison of financial statements over a number of years while a vertical analysis offers a comparison of the various items in the statements.

Stittle (1997) argued that disclosure of financial statements by business entities allowed stakeholders to ascertain if management had materially deviated from the requirements and standards set out by oversight bodies. Stittle (1997) further argued that understanding the stewardship of management by evaluating financial statements allowed users to make informed economic decisions. Diamond (2001) observed that financial statements needed to have certain characteristics in order to benefit end users. The main qualitative characteristics relate to content and presentation. The content characteristic requires financial statements to be relevant and reliable while the presentation characteristic required the financial statement to be comparable and understandable. Embracing the two qualitative characteristics allows for users of financial statements to undertake ratio analysis. Diamond (2001) pointed out that ratio analysis was a preferred market based analysis model as it allowed users to determine trends and patterns established over a period of time.

### **1.1.3 Management Accounting (MA) Practices and Financial Performance**

Various studies have attempted to identify the existence, or lack thereof, between MA and financial performance. Merchant (1981) conducted a study to determine if budgeting had an influence on the financial performance. Merchant's (1981) study concluded that firms which embraced budgeting recorded better financial performance. However, budgeting was not found to be beneficial for small firms (Merchant, 1981). Hansen and Van der Stede (2004) also revealed that budgeting was vital in enhancing financial performance. Hansen and his colleague, Van der Stede observed that budgeting benefitted firms through improving the performance

evaluation, strategy planning, and operational planning (Hansen & Van der Stede, 2004).

Kaplan and Norton (1992) argued that adoption of MA practices improved both financial and nonfinancial performance of organizations. In presenting their model, the balance score card, Kaplan and Norton (1992) argued that combining financial and nonfinancial performance evaluators positively impacted on the value of the firm (Kaplan & Norton, *The Balance Scorecard: Measures that Drive Performance*, 1992). James and Hoque (2000) confirmed that embracing the balance score card as a management accounting tool positively impacted on a firm's performance (Hoque & James, 2000).

Shield's (1995) study on the impact of activity based costing (ABC) revealed that firms gained financially from using the model in their costing decisions. Several studies have confirmed that the use of management accounting practices in ascertaining the costs of products and services positively influenced the profitability and sales volumes in different firm across varying industries. James and Hoque (2000) pointed out that manufacturing firms stood to gain the most from using activity based costing to apportion costs across departments and assembly lines.

#### **1.1.4 Commercial Banks**

The financial system in Kenya consistently receives global attention owing to the innovation of mobile money and its impact on the welfare of Kenyans. The banking sector in Kenya is a critical part of the country's financial sector and a vital business enabler. In 2018, banks reported pre-tax profits in excess of KES 152 billion making the sector one of the most profitable globally (Mwaniki, 2018). In 2017, the total profits reported by the banking sector was KES135.5 billion underlining their consistency in earning profits over the past decade. As of 1<sup>st</sup> June 2020, there were forty two registered commercial banks recognized by the regulator in Kenya.

The Kenyan financial sector is to a large extent controlled by the Central Bank, which regulates practice and policies. The banking industry is a critical enabler of the Kenyan economy owing to its role as a financial intermediary. Small and medium enterprises rely on banks to support business functions by processing payments and

providing capital. Following an Act of Parliament regulating the banking sector, banks were forced to implement a ceiling on lending rates.

## **1.2 Research Problem**

Management accounting practices differ in scope, effect, and applications. Legaspi (2014) studied the impact of MA practices in Philippine Industries and concluded that the adoption of MA aided firms to counter competition by producing products and services of superior quality. The study also revealed that embracing management accounting practices aided in improving customer satisfaction, enhanced the management's control function, and improved company profitability among the organizations studied. Ward (2012) observed that management accounting was a critical tool in guiding organizations to achieve their objectives. Macintosh and Quattrone (2010) also shared a similar view with Legaspi's study by arguing that embracing MA practices enabled management teams to understand their current operations better and address possible future shocks in business (Macintosh & Quattrone, 2010).

Various scholars have advanced numerous theories on MA practices. The contingency theory of MA argues that no single practice can be applied to all organizations. The theory advances specific influential factors that management must consider in deciding on the ideal management accounting practice. Clinton and his colleague observed that embracing a single method or practice in management accounting implied that a firm would not fully maximize the role of management accounting (Clinton & Van der Merwe, 2006). The two authors also pointed out that the inability to compare the various management accounting practices has hindered their effective implementation and application. The inability to compare management accounting practices across organizations has led to an overspending on MA initiatives by management teams with minimal or no returns as they are poorly supported in the decision making process.

Abdel-Kader and his colleague opined that the application of MA practices was flexible depending on the nature of operations which influence the approaches that firms adopt in costing and operational analysis (Clinton & Van der Merwe, 2006). Ward (2012) pointed out that random selection ultimately influences the choice of



specific techniques in MA that management teams select to suit their operations and ultimately the practice leads to inconsistencies. Ward (2012) further argued that the use of MA practices in the 21<sup>st</sup> century has increased though the levels of inconsistencies have also increased. Most firms have embraced management accounting methodologies to suit a specific intention of the process of management accounting. Clinton and his colleague observed that despite the inconsistencies in application of MA practices, management teams could still get a true reflection of the financial state of their firms, improve decision making, and encourage better performance (Clinton & Van der Merwe, 2006).

The 2019 Kenya Bankers Association (KBA) report on the state of banking countrywide revealed that growth of the industry has tapered over the last three years (Kenya Bankers Association, 2019). Legislative changes coupled by innovations by players in other sectors have negatively affected the growth of business among commercial banks in Kenya. Legislative changes have majorly affected how banks disburse loans by capping the interest rates that they charge. Other changes in the law have reviewed the capital structure of commercial banks with the CBK raising the minimum capital for banks with operations in Kenya. Mobile loans by players outside the banking industry have also negatively affected Kenyan commercial banks.

The mobile loans disbursed through software applications are unregulated and offer unsecured loans to Kenyans. Mobile loans are, however, not affected by the interest loan caps and charge as high as 120% per annum on the small amounts disbursed. In light of the difficult operative environments, some players in the Kenyan banking sector have been bought off or opted to merge to synergise their operations. The study intends to examine whether commercial banks have embraced management accounting practices and how the same has affected their financial performance in light of the challenges facing the banking sector.

Local studies assessing the influence of MA practices on financial performance of business entities are unpublished undergraduate and graduate thesis papers. Njoki (2014) focused on the impact of MA on Kenyan commercial banks and concluded that players in the sector not only embraced management accounting practices but also perceived them as major contributors to their financial success (Njoki, 2014). Other local studies on MA practices have focused on the manufacturing sector.

Wairegi, (2011), Waweru (2012), Makau, Wawire, and Ofafa (2013) found out that MA practices were widely adopted by manufacturing firms in Kenya to improve financial and nonfinancial performance. While a majority of studies on MA have focused on firm performance, there is need to narrow down on the impact of the MA practices on financial performance by evaluating commercial banks. What are the effects of MA practices on the financial performance of Kenyan commercial banks?

### **1.3 Objective of the Study**

To investigate the effect of management accounting practices on the financial performance of commercial banks in Kenya.

### **1.4 Value of the Study**

The Kenyan banking sector has increasingly become more complex as innovations and stringent control by the regulator affect the commercial banks performance. This study intended to detail the MA practices adopted by banks in Kenya, and how the same has impacted on their performance. The study will, therefore, assist scholars and analysts ascertain the specific management accounting practices that would improve performance of Kenyan banks.

The study will also benefit management teams of savings and credit co-operatives (Saccos) and foreign banks that would wish to set their operations in Kenya as they will gain knowledge on how to counter the established banks. By highlighting the management accounting practices adopted by local commercial banks, foreign players with an interest in the Kenyan market can develop alternative and superior practices to shield and grow their customer numbers. This study will aid makers of policy working for the private sector and government entities. The discussion on the internal operations of commercial banks in Kenya would provide insightful information on how to improve financial and nonfinancial performance.

Stakeholders in the Kenyan banking sector are interested in enhancing quality of services offered to generate greater value to customers. The government is particularly interested in the operations of commercial banks owing to their

contribution to Kenya's Gross Domestic Product (GDP). The study will provide a basis for scholars, researchers and other academicians interested in understanding the operations of Kenyan commercial banks. This study will contribute to the knowledge of management accounting, performance, and academics in general.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter highlights the theories and concepts that form the background of the study. The chapter is organized systematically starting with the theories underpinning the study, concepts, empirical reviews, and a summary.

#### 2.2 Theoretical Foundation

The concept of MA has been widely explored by scholars and practitioners. Contributions in the form of theories and models of MA are widely published and referenced in the field of accounting. The use of theories in research is to define, relate, and propose interrelated concepts with a view of explaining or predicting situations by demonstrating existence or lack thereof between or among the research variables. The study will expose three theories namely; contingency theory and new institutional social theory and Actor Network Theory. The three theories encapsulate the research variables and offer a detailed perspective on the MA practices adopted, and their impact on the performance, from a financial perspective, of Kenyan commercial banks.

##### 2.2.1 Contingency Theory

The above theory in MA highlights the lack of uniformity in applying management accounting practices across organization. Burns and Stalker (1961) noted that comparing MA practices across organizations was unlikely to yield like for like similarities (Burns & Stalker, 1961). Otley (1980) observed that it is not possible to apply a single and general standard of MA to all organizations. The contingency theory postulates that every firm will embrace its own MA practices.

The factors proposed are external, organizational, and processing factors. External factors include environmental uncertainty, customer purchasing power, and competitor actions. Organizational factors include internal forces influencing decisions such as size, management structure, and the workplace culture. Processing factors refer to the production process that a firm adopts. The nature of production

determines the processing system, product perishability, use of TQM, use of JIT, and technology advancement.

The contingency theory relevance to the study was evident in its demonstration of the dynamic nature of MA practices across the commercial banking industry in Kenya. The theory also proposes specific factors that management teams must consider in deciding the appropriate management accounting practices suitable for their operations (Otley, 1980). The theory will, therefore, guide the study in assessing the similarities or lack thereof in the management of commercial banks in Kenya.

### **2.2.2 The New Institutional Social Theory**

The new institutional social theory was first introduced by Meyer and Rowan (1977) in a seminal paper on the American educational sector. The two scholars observed existing formal structures in that era were inconsistent and loosely coupled with work practices. Existing literature and theory could not explain the observation. Meyer and Rowan fronted the new institutional social theory to explain their observation (Meyer & Rowan, 1977). Liaqat (2006) in support of Meyer and Rowan's argument pointed out that an environment for a firm is not a mere conceptualization of tasks and relational networks of customers and suppliers that creates a need for operational control and coordination by management (Liaqat, 2006).

Contrary to the view, a firm's environment includes its cultural beliefs and social norms which are reflected in the organizational structures and procedures. The essence of embedding cultural rules and social norms in an organization is to achieve legitimacy and secure core resources that guarantee the survival of an entity. Liaqat (2006) argued that the pursuit for legitimacy and core resources explains the different organizational structures across firms operative in similar environments.

Burns and Stalker (1961) further argued that the diffusion process creates pressures which led firms' institutional setting to become isomorphic compared to other firms (DiMaggio & Powell, 1983). Hannan and Freeman (1977) pointed out that competitive isomorphism as demonstrated by market forces was not given as much emphasis such institutional isomorphism. Hannan and Freeman identified three types of institutional isomorphism; mimetic isomorphism, coercive and normative isomorphism. Emphasis on institutional isomorphism underline the critical role of

social role and political role in influencing organizational structure and processes (Hannan & Freeman, 1977).

Meyer and Rowans (1977) also opined that formal procedures and structures within a business entity may decouple due to work practices. In their argument, they postulated that the said formal procedures and structures are separated from daily firm practices as this ensures consistency in executing operations. Oliver (1991) argued that some firms embrace strategy in responding to institutional pressures. By embracing a strategic approach such firms comply with set out rules or adopt to formal procedures and structures (Oliver, 1991). Mia (2000) pointed out that adopting a strategy in responding to institutional pressures also creates legitimacy which ensures that a firm secures resources critical to its operations (Mia, 2000).

Zucker (1977), one of critics of the new institutional social theory argues the idea of decoupling actual operations from formal procedures and structures is fundamentally misguided. Zucker further argues that decoupling actual operations from a firm's formal procedures and structure makes it impossible to define an organization (Zucker, 1977). Tolbert and Zucker (1996) also critic the new institutional social theory by arguing that its ambiguous. The two authors argue that the theory lacks clarity in its phenomenological argument as the explanation of institutional culture and decoupling is contradictory (Tolbert & Zucker, 1996). Giddens (1979) also critiqued the theory as too simplistic as narrow in defining the social and political impact in influencing the organizational structure (Giddens, 1979).

The New Institutional Social Theory relates to the study as it highlights the role of environment in shaping MA practices. The new institutional social theory postulates that some entities existed in environments that were highly institutionalized which lead them to adopt structures and procedures which suited the said environments.

### **2.2.3 Actor Network Theory**

The above theory was first fronted by Michael Callon, John Law and Bruno Latour. The theory sought to explain the link between science and technology (Anand, Sahay, & Saha, 2004). The Actor Network Theory assumes that business entities are a result of assemblies and interactions among heterogeneous networks and actors. According

to Hoque and James (2000), the theory, however, does not infer any antecedent or consequence of the interactions. The Actor Network Theory underscores the individual interests and agendas of actors within the network. The uniqueness of the theory arises from the symmetrical attention it gives to human and non-human entities arguing that there is no difference between people and objects (Hoque & James, 2000).

The developers of Actor Network Theory wanted to bring to the attention of scholars that understanding complex social situations would significantly be hindered if human, non-human, social, and technical elements were separated (Ainikkal, 1993). Organizations are a set of processes where actors and networks participate in ideas they advocate and continuously translate to achieve desired levels of network stability. Upon reaching desired stability and all actors are united, the network is referred to as actor-network.

The Actor Network Theory relates to the study as it highlights the role of organizational interactions in shaping the policies and activities. The Actor Network Theory demonstrates the complexity of realities that business entities face in pursuing their objectives. Guided by the Actor Network Theory, the study aims to identify how the complexity in the Kenyan commercial banking sector has shaped the MA practices adopted players in the sector.

### **2.3 Empirical Review**

Alamri (2019) sought to demonstrate the linkage between strategic MA facets and the organizational performance of listed Saudi companies. The study relied on regression analysis to determine the association and interviewed 435 accounting managers deployed in the listed firms. Alamri's (2019) study sought to identify the strategic MA facets as well as their effect on financial perspective as well as non-financial perspective of performance. The research findings revealed that strategic management accounting facets affected organizational performance. Using the study's findings, the researcher recommended that management teams should embrace strategic management accounting to boost their financial and non-financial performance (Alamri, 2019).

Malgueno, Lopez-Valeiras, and Gomez-Conde (2018) oversaw a research to ascertain the influence of balance scorecard on the innovation and performance, from a financial perspective of SMEs. The researchers surveyed 201 SMEs in Spain and embraced a quantitative empirical evidence approach. The study findings revealed that using the balance score card for forward feed control led to improved financial performance and improved levels of innovation. The study also found out that embracing balance score card led to improved stability of operations (Malagueno, Lopez-Valeiras, & Gomez-Conde, 2018).

Bhutto and Rajper (2019) directed a research to ascertain the significance of MA practices on the performance of Indian corporates from a financial perspective. The empirical study relied on a survey to assess how practices such as budgeting, standard costing, and accounting for overheads were embraced by corporates in India in decision making. The study relied on hypothesis and ascertained that Indian firms used both traditional and modern MA practices at the various management levels to make decisions. The study also revealed that the use of traditional and MA practices enabled Indian firms to accurately capture the cost and profit elements of their operations. The study by Bhutto and Raiper (2019) also concluded that firms using activity based costing had a better perception in benchmarking sand budgeting than those that did not embrace the two tools (Bhutto & Rajper, 2019)

Yolla (2018) conducted a research evaluating the effects of organizational budget polices on to determine the financial performance of select Tanzania based manufacturing firms. Yolla embraced a descriptive research design to analyse the operations of the 75 respondents. The findings revealed that formalized budgeting directly led to higher sales revenues. Yolla (2018) also observed that formalized budgetary controls had varying impacts on the financial performance among the manufacturing firms evaluated. Firms that embraced formal budgeting planning had greater growth in sales compared to those that embraced formal budgetary control. However, formal budgetary control was more impactful on growth of profit compared to formal budgeting planning (Yolla, 2018).

Prajogo and Toy (2018) conducted a research to ascertain the nature and extent of association between information management, process management, and operation performance of Australian manufacturing firms. Prajogo and Toy's study surveyed



202 manufacturing with a view of identifying if the relationship between the management accounting practice variables had an impact on performance. Prajogo and Toy (2018) used a hypothesis model to identify the nature and extent of relationship between study variables. The findings revealed that both internal and external information management was positively related to the internal and external process management. The researchers also concluded that internal process management positively impacted on both internal and external performance. The external process management process was only of positive impact on the external operational performance (Prajogo & Toy, 2018).

Locally, Gachoka, Aduda, Kaijage and Okiro (2018) conducted a research to define the effects of internal controls on the connection between budgeting function and performance of Kenyan. The researchers also included an intervening factor to demonstrate the relationship among study variables. The study relied on descriptive research design to analyse operation of 104 churches in Kenya. Hypothesis were drawn to ascertain the nature of relationships evident in the research.

The study concluded that internal controls have intervening effects on the association between budgeting practices and performance of Kenyan churches. The study also concluded that churches in Kenya have embraced budgeting and use of internal controls which have positively affected their performance. The researchers recommended that churches should integrate their internal controls to the budgeting function for greater growth in member numbers (Gachoka, Aduda, Kaijage, & Okiro, 2018).

Kamau conducted a research to ascertain the impact of budgetary process and practices on the budget performance of Kenyan state corporations by evaluating Kenyatta National Hospital (KNH). The variables used to assess the budgetary process included budgetary participation, levels sophistication, as well as feedback and controls. Budgetary performance was examined through compliance, value for money and goal achievement. The study relied on a descriptive research design and sampled 72 employees at KNH who were involved in the budget making process. Kamau's study recognized that budgetary participation had an effect on the performance of budgets among state corporations in Kenya (Kamau, Rotich, & Anyango, 2017).

Gichaaga(2014) conducted a research to define the effects of MA practices on the financial performance of manufacturing companies in Kenya. Gichaaga's study embraced a descriptive survey design and sampled 46 Nairobi based manufacturing firms. Gichaaga's study determined that manufacturing firms in Kenya majorly relied on information for decision making practices as the ideal MA practice. Other MA practices used included; strategic analysis, budgeting, evaluating performance, and costing. The research also established that application of MA practices had improved the return on equity (ROE) of the manufacturing firms evaluated (Gichaaga, 2014).

## **2.4 Determinants of Financial Performance in Commercial Banks**

Aburime (2005) revealed that financial performance determinants in commercial banks are internal and macroeconomic factors. Internal factors refer to bank specific determinants which result from its operations. Internal elements are always within total control of the management teams and the board of directors. Macroeconomic factors refer to external determinants beyond the control of the bank. The factors affect the sector and large and management or the board have minimal or no influence in their occurrence (Aburime, 2008).

### **2.4.1 Capital Adequacy**

Capital adequacy is classified as an internal determinant. Diamond (2001) reveals that a greater capital base for a commercial bank is always favourable as underscores its stability (Diamond, 2001). Given the risk involved in selling commercial loans, a bank ought to have enough to caution its operations in the event of economic shocks. Diamond (20001) further argues that commercial banks with thin capital have a higher risk of insolvency making them susceptible to a bank run should depositors become aware of the same.

Dang (2011) notes the capital adequacy ratio (CAR) reveals the intrinsic ability of a commercial bank to support operations in the event of economic shocks. Sangmi and Nazir (2010) observe that banks with healthy CAR would easily invest in riskier opportunities compared to their peers as they are cautioned by the healthy capital funding. Investing in riskier opportunities yields higher than average market returns leading to better payoffs for investors (Sangmi & Nazir, 2010).

### **2.4.2 Asset Quality**

Sangmi and Nazir (2010) observed that asset quality is critical internal factor that determines the financial performance of publicly traded banks. Stein (2017) opined that bank assets are classified as fixed or current depending on the ease to convert them into liquid cash. Stein (2017) further argued that since loans formed the largest asset base for most commercial banks, they faced an inherent risk of default thereby reducing their value. Dang (2011) pointed that the Non-Performing Loan (NPL) ratio offered the best indicator on the quality of a commercial bank's assets. Sangmi and Nazir (2010) also highlighted the need for analysts to place more emphasis on the NPL ratio to ascertain the banks' financial performance

### **2.4.3 Management Accounting Practices**

Sangmi and Nazir (2010) observed that management accounting practices competency was key internal performance determinant. Ilhomovich (2009) underscored the role of management in decision making which ultimately determined the course business for commercial banks. Unlike other forms of business, the banking sector requires a higher level of alertness and awareness to prevent inherent risk of business collapse (Ilhomovich, 2009). According to Sangmi and Nazir (2010) financial ratios on liquidity, profitability, leverage, and operative efficiency determine the competency of the management team in a commercial bank.

### **2.4.4 Liquidity Management**

Liquidity management refers to an internal factor that reveals a commercial bank's ability to pay its short term and maturing debts. Dang (2011) argues that liquidity management demonstrates a bank's ability to handle deposits and prudently offer loans. Liquidity ratios offer an insight of a bank's ability to handle its obligations as and when they arise. According to Dang (2011) failure by management to effectively manage liquidity could create operational difficulties that would affect a bank's core business.

#### **2.4.5 Gross Domestic Product (GDP) Growth Rate**

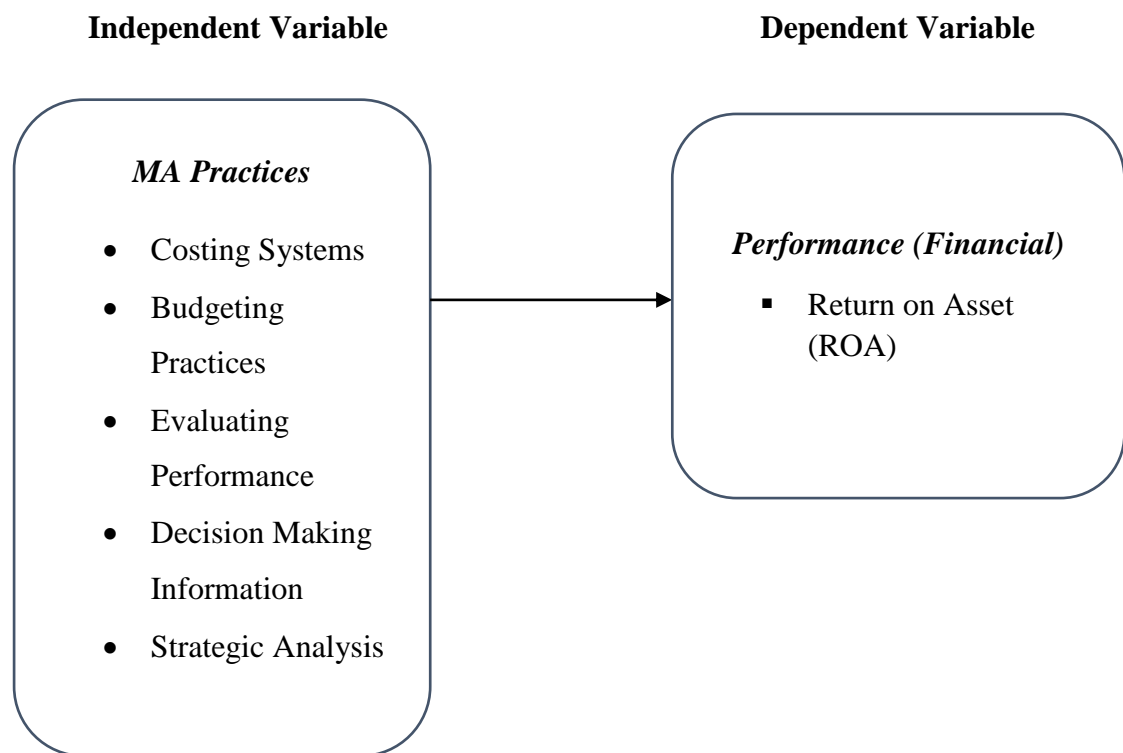
Said and Tumin (2011) argued that the GDP growth rate is an external factor that affects a bank's financial performance. A country's growth rate in GDP outlines the increase or decrease in growth of the total value of the nation's goods and utilities produced (Said & Tumin, 2011). A country witnessing a Growth rate in GDP will also report an increase in the financial performance of the banking sector given the critical role the latter plays in supporting the economy. Stein (2017) observed that increase in GDP growth rates is often characterized by increasing rates of credit which positively impacts on commercial banks' financial performance.

#### **2.4.6 Interest Rates**

Ledgerwood (1998) opined that interest rates are an external factor which directly impacts on banks' financial performance (Ledgerwood, 1998). Said and Tumin (2011) argued that the interest rates determine the actual profit that a bank makes on offering credit. In Kenya, the interest rate on loans and savings is capped. Banks are only allowed to offer loans within a certain rate thereby denying credit to customers with a higher risk of default. Stein (2017) observed that banks operative in a free market have to balance between their pursuit profit and the risk of default by the borrower.

### **2.5 Conceptual Framework**

Empirically testing the relationship between MA practices and financial performance relied on a conceptual framework. The conceptual model had two perspectives: First, was the identification of the extent to which commercial banks in Kenya had adopted the following management accounting practices; costing system, budgeting, evaluating, performance, decision making information and strategic analysis. After identification, the study then assessed how the said practices had affected the performance of commercial banks from a financial perspective. Financial performance was evaluated using return on asset (ROA) financial ratio.



## 2.6 Summary

The use of MA practices to improve firm performance is well documented in the management accounting studies. From the reviewed literature, it is evident that scholars and researchers agree that MA practices directly influence the financial performance of business entities. The prescriptive literature on management accounting reveals an association between practices and financial performance.

Almari (2019) study on the link between strategic MA facets and the firm performance of listed Saudi companies demonstrated that indeed embracing MA has a direct and positively impacts the entity performance. Bhutto and Raiper's (2019) study ascertaining the influence of MA practices on performance, from a financial perspective, of Indian corporates also confirms the positive impact of management accounting on financial performance. Malgueno, Lopez-Valeiras, and Gomez-Conde (2018) research work to ascertain the effect, or lack thereof of balance scorecard on the innovation and performance, financially, of SMEs also reveal the impact of MA practices on the innovation process.

The empirical studies also demonstrated that embedding management accounting practices to the firm's overall strategy led to higher growth internally and externally. Yola's (2018) research on the role of effects of budgeting on the financial performance of select manufacturing firms demonstrating the importance of planning in improving revenues and profitability. Prajogo and Toy (2018) also underscored the importance of linking strategy and management accounting for improved internal and external business performance.

The local studies on the impact of management accounting practices on financial performance have majorly focused on the banking sector as a whole, manufacturing firms and state corporations. A need, therefore, exists to assess the impact of MA practices on the banking sector more critically given the sector's significance in the economy. This study seeks fill the gap by evaluating the operations of all commercial in Kenya, as of September 2020 to ascertain the MA practices adopted and how they impact on financial performance.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter explained the research design adopted, the population of the study, sampling design that was used as well as the tools that were used to collect data and finally do the analysis. This chapter was therefore the guide to the research data collected and analysis model to be used.

#### **3.2 Research Design**

The study embraced a descriptive research design with similar variables used across all respondents in the study. Liaqat (2006) defines descriptive research design as a model of analysing human or organization characteristics, thoughts, attitudes, operations and behaviour with a view of understanding an underlying phenomenon. The research design aided in establishing if management accounting practices adopted by Kenyan commercial banks had had an effect on their financial performance. The research design did not allow the manipulation of the population behaviour due to limited time of the research (Saunders, Lewis and Thornhill, 2009).

#### **3.3 Population of the Study**

The population of this study consisted of all commercial banks operative in Kenya as of September 2020. Central Bank of Kenya (CBK) data on banks in Kenya as at September 2020 indicated that there were 42 licensed commercial banks.

#### **3.4 Data Collection**

A combination of both primary and secondary data was used in this study. Primary data was collected from structured questionnaires and telephone interviews. The selected data collection modes allowed the researcher to enquire further on the study details that required expounding or clarification. A standardized questionnaire was used to enable comparability.

Secondary reports was collected from financial reports to be provided as well as the Kenya Bankers Association reports. The data was also collected from online resources on operations of commercial banks in Kenya. The secondary data offered information on three ratios forming the study's dependent variable. A five-year analysis (2015-2019) of the financial statement demonstrated if the management accounting practices embraced by listed commercial have impacted on their financial performance.

### **3.5 Data Analysis**

Completed questionnaires and the secondary data collected was analysed for completeness, consistency and to eliminate errors. Statistical Packages for Social Sciences (SPSS) was used to code quantitative data to enable comprehensive regression analysis. Using a multiple regression model the study examined the existence, or lack thereof, magnitude, and direction of the link among the research variables

#### **3.5.1 Analytical Model**

The study relied on the analytical model depicted below;

$$Y=f(\text{MA practices})$$

#### **3.5.2 Empirical Model**

The empirical model embraced in the study is as demonstrated below;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where;

Y - Represents financial performance as demonstrated by ROA.

$\alpha$  – is the intercept

$\beta_1 \beta_2 \beta_3 \beta_4 \beta_5$  – Coefficients to be determined by the model

$X_1$  = the costing system practice

$X_2$  = the budgeting practice

$X_3$  = the performance evaluation practice



$X_4$  = the information for decision making practice

$X_5$  = the strategic analysis practice

$\varepsilon$  – error term

### **3.5.3 Operationalizing the Variables**

Independent variables  $X_1$   $X_2$   $X_3$   $X_4$  and  $X_5$  were obtained from the average score responses which were determined using a Likert scale to enable the statistical interpretation. The mean score was determined for each individual independent variable and then regressed against the values of Y (ROA) over a five-year period from 2015-2019. The analysis then regressed the MA practices against performance from a financial perspective as depicted by the return on asset ratio (ROA) to establish the nature of relationship. Interpreting the regression analysis results was based on the coefficient of determination, significance of F statistics, and significance of beta values from the independent variables coefficients. Expected level of confidence was 95%.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

The chapter examined the outcomes and the related interpretations of the analysed data. The chapter contains descriptive statistics, graphical presentations, correlation and the pooled regression analysis and finally interpretations of the study findings.

##### 4.1.1 Response rate

The research population was 42 respondents and all questionnaires were successfully administered and returned. The response rate was 83.33%

Response Rate	Distribution	
	Frequency	Percent
Returned	35	83.33%
Not returned	7	16.67%
Total	42	100%

**Table 4.1: Response rate**

#### 4.2 Descriptive Statistics

This chapter contains summary statistics and graphical analysis.

##### 4.2.1 Summary Statistics

**Table 4.2 Summary Statistics**

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
ROA	35	3	5	3.91	0.373
Costing system	35	3.5	4.75	4.2357	0.3262
Budgeting	35	3.5	4.5	4.0286	0.23304
Performance evaluation	35	3.667	5.000	4.410	0.324
Information for decision making	35	3.75	4.75	4.1214	0.30541
Strategic analysis	35	3.5	4.75	4.4071	0.26489
Valid N (list wise)	35				

Author 2020

The Table above indicates that average ROA is 3.91, which indicates that 3.91% is the average return on assets. The average for costing system over the analysed time was 4.2357. The tables show that the minimum and maximum for the performance evaluation was 3.667 and 5 respectively while its mean was 4.410.

The table indicates that the average for budgeting over the considered time frame was 4.0286 while its minimum and maximum was 3.5 and 4.5 respectively. Further, on the table it is observed that the average for performance evaluation was 4.410 while the minimum rate was 3.667 and the maximum rate was 5. The table also indicates the average for Information for decision making was 4.1214 while its minimum was 3.75 and the maximum was 4.75. Finally, the tables indicate that the average for strategic analysis was 4.4071 while its minimum and maximum was 3.5 and 4.75 respectively.

### **4.3 Correlation analysis**

The researcher set to establish the nature of association between the variables of the study. For this to be determined, a correlation analysis was conducted. The relationships were determined using the correlation coefficient model fronted by Pearson.

**Table 4.3: Relationship among variables**

Correlations		ROA	Costing system	Budgeting	Performance evaluation	Information for decision making	Strategic analysis
ROA	Pearson Correlation	1	0.11	0.113	-.349*	-0.099	-0.008
	Sig. (2-tailed)		0.528	0.516	0.04	0.57	0.961
	N	35	35	35	35	35	35
Costing system	Pearson Correlation	0.11	1	0.151	-0.152	-0.111	.452**
	Sig. (2-tailed)	0.528		0.388	0.385	0.525	0.006
	N	35	35	35	35	35	35
Budgeting	Pearson Correlation	0.113	0.151	1	-0.159	0.027	-0.134
	Sig. (2-tailed)	0.516	0.388		0.36	0.876	0.441
	N	35	35	35	35	35	35
Performance evaluation	Pearson Correlation	-.349*	-0.152	-0.159	1	0.077	-0.229
	Sig. (2-tailed)	0.04	0.385	0.36		0.66	0.186
	N	35	35	35	35	35	35
Information for decision making	Pearson Correlation	-0.099	-0.111	0.027	0.077	1	0.053
	sig.(two-tailed)	0.57	0.525	0.876	0.66		0.764
	N	35	35	35	35	35	35
Strategic analysis	Pearson Correlation	-0.008	.452**	-0.134	-0.229	0.053	1
	Sig. (2-tailed)	0.961	0.006	0.441	0.186	0.764	
	N	35	35	35	35	35	35

The results showed that return on assets had a weak and negative correlation with performance evaluation, strategic analysis and information for decision making but showed a mild and positive correlation with costing system and budgeting. As all the

correlation values are below 0.75, hence there is no multicollinearity among the research variables.

**Table 4.4: Model of the summary**

Model	R	R-Square	Adjusted R-Square	Std error of Estimate	Durbin- watson
1	.381a	0.145	-0.002	0.374	1.837

**Author 2020**

The R square value (Coefficient of determination) is 0.381 which means 38.1% of the variation in ROA (independent variable) was as a result of the independent variable. The results also demonstrated that the standard error of estimate is 0.374 hence showing that there is little variation and thus the correlation will be almost perfect.

The Durbin-Watson measures autocorrelation and a value towards 0 indicates a positive autocorrelation. The results show the value is 1.837 hence indicating a positive autocorrelation.

**Table 4.5: Calculated Regression coefficients**

Co-efficient		unstandardized co-efficients		standardized co-efficient	t	sig.	collinearity statistics	
model		B	std. error	Beta			Tolerance	Var.IF
1	Const.	6.136	2.281		2.69	0.012		
	Costing system	0.122	0.23	0.106	0.529	0.6	0.73	1.371
	Budgeting	0.039	0.293	0.025	0.134	0.894	0.885	1.13
	Performance evaluation	-0.409	0.208	-0.355	-1.965	0.059	0.901	1.109
	Information for decision making	-0.066	0.214	-0.054	-0.308	0.76	0.959	1.043
	Strategic analysis	-0.186	0.289	-0.132	-0.643	0.525	0.7	1.428

Table 4.5 revealed the following regression equation

$$Y = 6.136 + 0.122 X_1 + 0.039 X_2 - 0.409 X_3 - 0.066 X_4 - 0.186 X_5 + \varepsilon$$

The regression equation found an insignificant positive relationship between return on assets and costing system whereas there was an minor positive relationship between ROA and budgeting. The findings also found out that performance evaluation had an insignificant negative relationship with return on assets. Further the table shows that information for decision making had a strong negative relationship with ROA. The findings further showed that strategic analysis has a negative relationship with return on assets.

#### **4.4 Interpretation of Research Findings**

The result findings of this research study demonstrated that there was an minor positive relationship between ROA and costing system. This shows that an increase in costing system would lead to an increase in ROA. Similarly, Almari (2019) study on the link between strategic MA facets and the firm performance of listed Saudi companies demonstrated that indeed embracing MA has a direct and positively impacts the entity performance. The study found an insignificant positive relationship between ROA and budgeting hence the conclusion that an increase in budgeting leads to a slight increase in ROA. Baines and Langfield-Smith (2003) also observed that firms which greatly relied on non-financial accounting information recorded an improvement in performance.

The research observed that performance evaluation had an insignificant negative relationship with return on assets hence an inverse relationship between the two variables. However, Wawire, and Ofafa (2013) found out that MA practices were widely adopted by manufacturing firms in Kenya to improve financial and nonfinancial performance. The study showed that information for decision making had a negative relationship with ROA thus a rise in decision making creates a decrease in ROA. A study by Mia (2000) observed that hotels which embraced management accounting systems recorded an improvement in both their financial and non-financial performance.

The research study findings also found out that strategic analysis has a negative relationship with ROA thus an inverse relationship between the two variables. According to Chenhall and Langfield-Smith (1998) argued that firms which embraced advanced MA practices such as benchmarking and strategic management accounting did not always record improved financial performance.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The chapter examined the findings of the study, the derived conclusions as a result of the findings and the recommendations arising from the research. This study also looks at the limitation of the research and makes suggestions of areas that may require further study.

#### 5.2 Summary

The purpose of the research was to look to investigate the influence of MA practices on the performance, financially, of Kenyan commercial banks. The research had costing system, budgeting, evaluating performance, decision making information and strategic analysis as independent variables and return on assets as the dependent variable.

The population of this study consisted of licensed commercial banks operative in Kenya as of September 2020. The study relied on a descriptive and a cross-sectional study design. The study also relied on primary data. Descriptive statistics as well as inferential statistics were the mode of statistics. The research population was 42 respondents and only 35 questionnaires were successfully administered and returned. The average ROA was 3.91 while its minimum and maximum was 3 and 4 respectively.

Return on assets had a weak and negative correlation with performance evaluation, strategic analysis and information for decision making but revealed a positive correlation though weak, with costing system and budgeting. The R square value was 0.381 which means 38.1% of the variation in ROA is explained by the independent variables.

The study found out an insignificant positive relationship between return on assets and costing system whereas there was a trivial positive relationship between ROA and budgeting. The findings also found out that performance evaluation had an insignificant negative relationship with return on assets. Further the table shows that



information for decision making had a negative relationship with ROA. The findings further showed that strategic analysis has a negative relationship with ROA.

### **5.3 Conclusion**

The study found out an insignificant positive relationship between ROA and costing system hence an increase in costing system would result to a positive change in ROA whereas there is an insignificant positive relationship between ROA and budgeting hence the conclusion that an increase in budgeting leads to a slight increase in ROA. The findings also revealed that performance evaluation had an insignificant negative relationship with ROA hence an inverse relationship between the two variables. Further the table shows that information for decision making had a negative relationship with ROA thus an increase in use of information for decision making led to a decrease in ROA. The findings further showed that strategic analysis has a negative relationship with return on assets thus an inverse relationship between the two variables.

### **5.4 Recommendations**

The researcher came to a conclusion that costing system and budgeting practices in banks had a positive consequence on ROA among Kenyan banks. However, the research recommends that bank managements should be wary about these Management accounting practices fluctuations as it could affect bank ROA. The researcher recommends that bank managements should have policies on how to reduce these fluctuations.

The researcher came to a conclusion that costing system practices, budgeting practices, use of information for decision making, evaluating performance, and strategic analysis all have an effect on ROA and the government should have policies and strategic mechanisms to ensure GDP is growing and hence also have policies to enhance bank ROA. The study would help the government in coming up with those policies.

The findings of the study came to a conclusion that costing system practices, budgeting practices, use of information for decision making, evaluating performance, and strategic analysis all have an effect on ROA but the study recommends that more

research is done involving all other management accounting practices and how they affect ROA.

### **5.5 Study Limitations**

The study failed to consider all management accounting practices.

The research population only looked at Kenyan commercial banks and failed to cover the entire financial sector that includes insurance firms, microfinance banks and institutions, savings and cooperatives, credit societies, among other financial institutions.

The study only sampled 35 respondents, this is not a substantial representation of the whole population and a bigger sample would have increased the reliability of statistical estimates.

The study relied on quantitative data thereby no analysis of qualitative data was done.

The study only sampled respondents who were commercial banks and not other financial institution users.

### **5.6 Suggestion for Further Study**

The research makes a recommendation on further study and research on other management accounting practices.

The study also recommends further research to include other institutions in the finance sector like microfinance banks and institutions, insurance firms and Saccos.

Further study should focus on a bigger sample to improve the results of the study.

Further studies should use a mix of both quantitative and qualitative data to improve and strengthen the findings.

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**APPENDICES**

**RESEARCH QUESTIONNAIRE**

1. Name of your institution .....
2. What management position do you currently hold? (Mark appropriately)  
 Operations Manager ( )      Customer Relations Officer ( )  
 Financial Operations Officer ( )      Other ( )

***PART A –Costing System***

3. How often do you rely on the costing practices listed below in your operations?

	Never	Rare	Frequently	Always
Activity Based Costing				
Cost Benefit Analysis				
Product/Attribute Costing				
Quality Costing				

***PART B- Budgeting***

4. How often do you rely on the budgeting practices listed below in your operations?

	Never	Rare	Frequently	Always
Budgeting for planning				
Budgeting for the control function				
Budgeting practices for strategic planning				
Activity-based budgeting				

***PART C – Performance Evaluation Practice***

5. How often do you rely on the performance evaluation practices listed below in your operations?



	Never	Rare	Frequently	Always
Financial Estimates				
Benchmarks				
Customer related non-financial estimates				
Operation and innovation related non-financial estimates				

***PART D – Information for Decision Making***

6. How often do you rely on the following practices in decision making?

	Never	Rare	Frequently	Always
Break-even analysis				
Product benefit analysis				
Customer benefit analysis				
Sensitivity analysis in decision making				

***PART E- Strategic Analysis***

7. How often do you rely on the strategic analysis practices listed below in your operations?

	Never	Rare	Frequently	Always
Shareholder value analysis				
Long-term forecasting				
Industry analysis				
Competitive analysis				

***Thanks for Your Response***