AGENCY BANKING AND FINANCIAL INCLUSION OF COMMERCIAL BANKS IN SIAYA COUNTY, KENYA

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS, ECONOMICS AND TOURISM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE), KENYATTA UNIVERSITY.

APRIL, 2024

DECLARATION

This project is entirely original to me and has never been submitted to or been accepted for credit at another university.

Signature …… Date……

Agnes Anyango Dimbia

D53/CTY/PT/29839/2014

SUPERVISOR

I hereby confirm that the candidate worked on this project under my close supervision.

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DEDICATION

I dedicate this project to my son Zayne Asher and my parents Mr. and Mrs. Samuel Dimbia.

Thank you for support and motivation.

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OPERATIONAL DEFINITION OF TERMS

Agent: an organization or business that has been authorized by CBK and engaged by an institution to offer the institution's services in the institution's place according to the CBK Guideline's guidelines.

Agency banking: a third-party agency's banking services provision to customers on financial institution that is governed by prudential law and is licensed. The study's key measures entailed the cost of agency banking, time-saving of agency banking, serving hours of agency banking, and the convenience of agency banking.

Convenience of agency banking: the usefulness and ease of accessing financial services and products. The variable's measures comprised the distance to agent and the number of services offered by agents.

Cost of agency banking: all expenses associated with setting up and running agency banking services. The key indicators entailed operational costs and customer serving costs.

Financial inclusion: the policy objective of reaching both unbanked and banked households with an array of reasonably convenient, reasonably priced, and responsibly delivered financial services. The study utilized the number of transactions per day as the key measure to financial inclusion.

Serving hours of agency banking: the agency banking operating hours. The study measured the serving hours of agency banking via the normal agency banking working hours.

Time-saving of agency banking: the capacity of agency banking to reduce the amount of time required to access financial services. The variable's measures comprised the average time to serve a customer and the average time to reach the bank.

ABBREVIATIONS AND ACRONYMS

ATMs	Automated Teller Machines
CAR	Central African Republic
CBK	Central Bank of Kenya
DRC	Democratic Republic of Congo
FSD	Financial Sector Deepening Kenya
KBA	Kenya Bankers Association
KCB	Kenya Commercial Bank
NIC	National Industrial Credit
PCs	Personal Computers
PIN	Personal Identification Number
POS	Point of Sale
SPSS	Statistical package for Social science

ABSTRACT

In the contemporary business environment, the employment of agency banking as an alternate channel for the provision of banking services has proven an effective way of deepening banks' operational reach. As a result, numerous commercial banks have adopted the agency banking model as an avenue for enhancing financial services access, especially to individuals in remote rural regions. In the Siaya County context, there are 370 banks' agents. However, there exist no studies dedicated to the examination of these agency banking models' impact on financial inclusion. The study established that only three commercial banks operating in Siaya County employ agency banking model. Besides, there were inadequate studies conducted on the impact of agency banking on the financial inclusion of commercial banks in Siaya County.This study aimed to establish the impact of agency banking on the financial inclusion of commercial banks in Siaya County, focusing on all the banks currently employing agency banking in the county, i.e., KCB, Equity and Cooperative Bank. For the attainment of this goal, the study was guided by these specific objectives: to analyze the impact of the cost of agency banking on the financial inclusion of commercial banks in Siaya County; to analyze the impact of time-saving of agency banking on the financial inclusion of commercial banks in Siaya County; to assess the impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County; to analyze the impact of the convenience of agency banking on the financial inclusion of commercial banks in Siaya County. In terms of technique, the research issue was addressed by using the explanatory research design. Additionally, a sample of the Siaya County agents of regulated commercial banks was included in the study's target population. The target population for the research was chosen by the proportional random sampling technique. Seventy-four of the 370 agents in the population were chosen for the research. Data collection was done using structured questionaires that were given to participants.Both descriptive and inferential statistics were used with assistance of SPSS software tool. Descriptive techniques that include standard deviation and mean were used . Pearson correlation and multi linear regression were used for inferential techniques. Auto-correlation, multicollinearity, normality and homoscedasticity were tested before using linear regression models. findings were presented using percentages, tables , graphs and charts. The research found a strong correlation between financial inclusion and agent banking. According to the findings, the expense of agency banking has a major detrimental effect on Siaya County's commercial banks' ability to provide financial services. The research also discovered that agency baking's service hours, agency banking's ease, and Siaya County's financial inclusion of commercial banks all had a major favourable influence. In order to guarantee that agency banking services are adopted and utilised, the research advised banks to make these services more widely known and provide them at a discounted rate. Regular reviews of the bank management's agency policy are necessary to increase the number of agents and improve financial inclusion. The report also suggests that agency operators make the most of their serving hours, since this would boost financial inclusion by allowing them to serve a larger number of clients and earn more money in the process.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Access to services of financial nature differs significantly across the globe. Particularly, for the developing countries, the outreach of the financial systems or access to financial services remains a fundamental concern for most policymakers. Beck and la Torre (2016) assert that while financial services usage, measured as the possession of deposit accounts with financial institutions, has reached approximately 90 percent in most high-income nations, in a great number of middle- and low-income nations formal financial services' usage is still restricted to a few households and corporations. Besides, even in some developed economies, Demirguc and Klapper (2013) posit that almost one in five adults still lack bank accounts. In a majority of the developing and emerging economies, however, the proportion of unbanked adults can be as high as 90 percent, thus raising the question of why such a great number of persons in developing nations do not utilize financial services.

A report by World Bank (2018) attributes the failure of a substantial percentage of the populations in the developing and emerging economies across the globe in utilizing financial services to numerous barriers to financial access. Physical access or geography is identified as among the barriers to financial access within these countries. The report demonstrates that while some financial institutions permit their users to access financial services over the Internet or phones, some banks demand their users to either utilize an automated teller machine (ATM) or visit a branch. For some countries, however, the average distance from the households to the nearest ATM machine or bank branch is

relatively long, while the density of branches per square kilometer is low. For instance, in the context of Spain, there exist 96 branches per 100,000 persons and 790 branches per 10,000 square kilometers, while in other countries like Botswana and Ethiopia, there is only one branch per 10,000 square kilometers and one branch per 100,000 people respectively. The second barrier in the developing nations is proper documentation shortage. Generally, financial institutions regularly necessitate the acquisition of one or more identification documents, but in numerous low-income nations across the world, most individuals, particularly those not working in the formal sector, lack such papers. The final barrier to financial access in developing countries across the globe is cited as the need for minimum-account balance. The report states that many financial institutions demand minimum-account balances or fees that are unattainable by most potential users, thus leaving a substantial number of people in developing countries, across various geographical locations, with no bank accounts or access to financial services.

In the African context, Zins and Weill (2016) posit that despite positive developments in the financial services sector, financial systems within the continent still lag behind those in other developing nations. Specifically, the number of people that have bank accounts with a formal financial institution is reported to be less than a quarter of the adults. Similarly, in the business segment, many medium-sized and small enterprises across the continent identify access to finances and a bank line of credit as the primary inhibitor to success and growth. Moreover, the non-bank sectors of Africa's financial systems portray even lower levels of development than banking. Beck, Demirguc-Kunt, and Levine (2010) established that less than half of the countries within the continent have stock markets, and even fewer have liquid stock numbers. Particularly, after an evaluation of the African stock markets

by the ration of traded to listed stocks, the study identified the African stock markets as among the most illiquid globally.

Despite the notion that a large portion of Africa comprises of unbanked adults, an analysis of account penetration across Africa exhibits a large variation in account ownership. Demirguc and Klapper (2012) discovered that while in Central Africa, only about 11 percent of the adults reported possessing an account with a formal institution, this percentage varied across the continent with Sub-Saharan Africa reporting 24 percent and the Southern Africa 51 percent. Particularly, the study revealed that in countries like the Democratic Republic of Congo and the Central African Republic, approximately 95 percent of adults were unbanked, whereas, in Morocco and Egypt, only 39 and 10 percent of adults are unbanked, respectively. Moreover, Demirguc and Klapper (2012) found that access to financial services differed based on gender, where men were reported to have a higher probability of having a financial institution account. In addition, the study uncovered that adults aged between the ages of 25 and 64 with tertiary education, within the African context, had a higher probability of reporting having a formal financial institution account.

In the Kenyan context, for a long time, accessing a bank was not a simple endeavor for the common Kenyan man, including the residents of Siaya County, which is somewhat a remote area (Dupas et al., 2012). Banks in Kenya were targeting the working class and the middle class as they were deemed to have more disposable income (Dupas et al., 2014). In the recent past, there has been substantial banking sector improvement with the establishment of agency banking (Gitonga, Kiraka & McMillan, 2019). From this

perspective, this study aimed to establish the connection between agency banking and increased accessibility to banking services in Siaya County.

1.1.1 Agency Banking

Kerich (2015) describes agency banking as third-party agency's delivery of banking services to customers for a licensed, providently regulated financial institution. In the context of a banking institution, it entails the contracting of retail outlets by financial institutions for client transactions' processing. The retail outlets' services include handling stop-payment requests, bill payments, balance inquiries, account transfers, conducting stock market, and bank transactions (Wanyoike, 2014). For the provision of these services, the banking agents get equipped with a mixture of Personal Identification Number (PIN) pads, barcode scanners for scanning bills for bill payment transactions, mobile phone, point of sale (POS) card reader, and at times Personal Computers (PCs) that utilize personal dial-up or other data connection devices for connecting with the bank's server (Abdirisack, 2015).

The operationalization of the agency banking model is reliant on several factors. Firstly, the availability of existing infrastructure, such as petrol stations, hotels, credit unions, and supermarkets, is vital to the functioning of the agency banking model (Mwangi, 2011). Besides, the agents can exist in multiple forms, including individuals, partnerships, trusts, parastatals, cooperative societies, or limited liability companies. On the other hand, the selection of these agents is based on their envisaged financial strategy and projections for the agency business, anti-money laundering procedure, services to be provided, and networks.

In a global context, Brazil is considered the initial adopters of the agency banking model. In recent years, agency banking services have gained significant popularity in developing countries. As a result, there has been a prevalence of banking agent networks in countries like the Philippines, Pakistan, Mexico, Colombia, and Peru. In the African continent, South Africa and Kenya have been employing the agent banking model in the expansion of financial services (Agalla, 2014). In the Kenyan market, agency banking services emerged in 2010 following the Central Bank of Kenya's publication of guidelines and measures for establishing banking channels for non-bank agents. In the contemporary world, the agency banking approach has grown to assist Kenyan banks in the expansion of their outreach without incurring extra set-up costs. As a result, the banks have converged under the Kenya Bankers Association (KBA), which solves problems affecting member institutions alongside functioning as a lobby for the banks' interests (Orita, 2015).

1.1.2 Financial Inclusion

Financial Inclusion is the capacity of a group, household, or an individual to use a variety of relatively convenient, price friendly, and responsibly delivered services (Ndegwa, 2017). The concept entails the removal of impediments in the form of non-price and price limitations from financial services as well as the enhanced ease in affordability, availability, and accessibility (Fungacova & Weill, 2015). There are several indicators to consider when measuring financial inclusion. The first indicator is access.

1..1.3 Questionable banking services

Questionable Customer services like What is the cost of the service? Do the intended customers have the information?, Was used to measure how clients use financial services

over time. Number of transactions and numerous digital transactions applies as an indicator in the quality of the product: Does the product or service match customer needs? What options are available to customers? Do the clients have an understanding and awareness of the financial products? (World Bank, 2015).

Financial inclusion is perceived as a primary economic growth enabler, and as a result, has turned out to be the main agenda and a policy priority in most developing countries (Gupta, Venkataramani & Gupta, 2012). In the Kenyan financial services market, financial inclusion has grown substantially and at a fast pace. As a result, the number of Kenyans excluded from having access to any kind of financial service has decreased from about 40 percent in 2006 to 17 percent in 2016 (FSD, 2017). According to an FSD report, as of 2019, financial exclusion had dropped to only eight percent (FSD, 2019). Moreover, the report signified that the number of Kenyans with formal bank accounts has risen to approximately 83 percent, with banks tripling their customer base to 41 percent of the population. Consequently, formal inclusion has enhanced Kenyans' portfolio richness, with about 50 percent of the users employing a mixture of both informal and formal solutions (FSD, 2019).

The rise in financial inclusion in the Kenyan landscape is linked to the enhanced growth of mobile money services, as evidenced by the fact that more than 79 percent of the adult population has access to these services (FSD, 2019). The prevalence of agency banking services, as well as mobile banking services such as KCB M-Pesa, Equitel, and M-Shwari, have also contributed to the increase of financial inclusion within the country. For the youths aged 18 to 25, mobile banking services have turned out to be the most common banking solution, hence increasing its popularity and usage. On the other hand, concerning

agency banking, there has been an increased availability and distribution of agents across nearly all Kenyan shopping centers and towns, which has boosted financial inclusion in the country.

1.2 Statement of the Problem

The research focused on all the banks adopting the model at the moment in order to determine the role agency banking plays in fostering financial inclusion in Siaya County. At the time this study was conducted, there were only three commercial banks in Siaya County employing agency banking. The three banks entailed Equity Bank, KCB, and Cooperative Bank. The three banks were expected to serve a population of 993,183 individuals (Infotrack, 2021), a task that seemed somewhat impossible. Moreover, the aforementioned banks are situated in the central districts of Siaya town, Bondo Town, and Ugunja town, hence posing challenges for those residing in rural regions to avail themselves of financial services. This situation highlights the banks' inability to achieve financial inclusion.

On the other hand, regarding the impact of agency banking on financial inclusion, mixed results have been obtained in determining the significance and relationship between the two variables. For instance, Afande and Mbugua (2015) discovered a direct correlation between adopting agency banking and a rise in financial inclusivity. On the other hand, Munoru (2013) found an insignificant relationship between agency banking and financial inclusion. This study, therefore, sought to bridge research gaps in existing studies by investigating agency banking’s contribution to financial inclusion in the context of Siaya

County. The study aimed to bridge this gap by examining the impact of agency banking on the financial inclusion of commercial banks in Siaya County.

1.3 Objectives of the Study

1.3.1 General Objective

The study's general objective was to establish the role of agency banking in promoting financial inclusion of commercial banks in Siaya County, Kenya.

1.3.2 Specific Objectives

i. To analyze the impact of cost of agency banking on the financial inclusion of commercial banks in Siaya County.
ii. To analyze the extent to which agency banking saves time for customers and improves financial inclusion.
iii. To ascertain how the model changes serving hours and promotes financial inclusion
iv. To analyze the impact of the convenience of agency banking on the financial inclusion of commercial banks in Siaya County.

1.3.3 Research Hypotheses

H_{01}: The cost saved by using agency banking does not impact the financial inclusion of commercial banks in Siaya County.

H_{02}: The time-saving of agency banking has no impact on the financial inclusion of commercial banks in Siaya County.

H_{03}: The serving hours of agency banking have no impact on the financial inclusion of commercial banks in Siaya County.

H_{04}: The convenience of agency banking has no impact on the financial inclusion of commercial banks in Siaya County.

1.4 Significance of Study

The outcome of this study may be of benefit to commercial banks' in that it will give insights into how financial inclusion can be accelerated by use of agency banking. The information gained from this study may provide commercial banks in Kenya with adequate information on any areas of their agency banking models that require improvement alongside presenting the features that have been beneficial to the Siaya County residents. From this information, the banks may also have the capacity to lobby for proper strategies and policy formulation for the full exploitation of agency banking opportunities that are viable in Siaya County. Besides, the application of this study's findings can be extended beyond the scope of Siaya County to the entire banking industry, for they can inform the industry on the apt strategies for the realization of increased financial inclusion throughout the country.

Alternatively, findings can be of significance to policymakers, particularly within Siaya County, for it sought to ascertain the importance of agency banking when it comes to financial inclusivity in the county. For scholars and other researchers, this study may not only serve as an ideal foundation for the understanding of agency banking and its role in promoting financial inclusion but may also create a platform for future research on the subject matter. Finally, for those interested in agency banking studies for academic

purposes, this study may provide a detailed body of theoretical and empirical information on agency banking and its implications on inclusivity, financially.

1.5 Scope of the Study

This study intended to ascertain the role of agency banking on financial inclusion of commercial banks in Siaya County. Target population was agents from 3 of the major commercial banks that have employed agency banking in Siaya County i.e., KCB, Equity bank and Cooperative Bank. The number of agent bankers in Siaya county was 370 as of December 2019 (FinAccess Report 2019). The period of the study extended from December 2020 to January 2021.

1.6 Limitations of the Study

Information restrictions could have been of the greatest concern in this study for there are only 3 banks with agency banking in Siaya. However, the study collected data from the three banks, hence increasing the results' reliability. Moreover, some of the agents could have located in remote geographical regions, which could have impeded not only the location of these agent bankers but also present navigational challenges, thus making it impossible for the researcher to gain information on these agent bankers. This limitation was addressed using both online and physical administration of questionnaires to the various agent bankers. Secondly, the target population for the study solely focused on agency banking in Siaya County, which has only three main banks, as above-mentioned. As such, the obtained findings from this study can only be applicable in the Siaya County context, hence bringing about a concern regarding the generalizability of the findings.

1.7 Organization of the Study

This chapter is divided into background information, statement of the problem, objectives of the study, significance of the study, the scope of the study, and restrictions. This chapter discusses the background information and introduction to the understanding of agency banking and financial inclusion. The background information segment commences with a discussion of financial access problems from the global context to the Kenyan setting then discusses how the implementation of this model in Kenya has improved access and inclusion within the country. The statement of the problem section forms the foundation for the formulation of the study limitations, significance scope, and research objectives. Chapter two provides a literature review on agency banking and financial inclusion. Furthermore, this chapter comprises of a theoretical review, presenting the various theories guiding the study, an empirical review on existing studies on the subject matter, and a chapter summary identifying any research gaps found on the existing pieces of literature. The third chapter, detail the methodology that was utilized for the realization of the study objectives. Chapter four depicts the analysis of the obtained data, interpretation, and presentation using tables and graphs. Chapter five discusses a summary of the findings, draws conclusions from the findings, and offers recommendations and suggestions for futher research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This part looks at various literature on the role of agency banking in promoting financial inclusion in Kenya commercial banks. The section has four sub-sections, first and second sections deal with empirical and theoretical aspects of existing literature on this subject. Third section is a summary of the identified literature and existing research gaps in the study of the subject matter. The last section covers the conceptual framework.

2.2 Theoretical Review

2.2.1 Financial Intermediation Theory

Gurley and Shaw(1960) developed this theory in the 60s.. The procedure which creates a connection between borrowers, those with a deficit and in need of financing, and the lenders, the entities, and individuals with excess funds and in need of investing (Marius & Cuza, 2010). Firstly, due to high transactional costs and information asymmetry, the direct meeting of borrowers and lenders is considered somewhat impossible, which forms the primary assumption for the financial intermediation theory. Regarding information asymmetries, several studies have established that these asymmetries can be of an ex-post nature, leading to costly state enforcement and verification or auditing, they can be interim, creating a moral hazard, or be of an ex-ante nature, producing adverse selection (Mitchell, 2005). Furthermore, the theory suggests that these informational asymmetries fabricate market imperfections that are nonconformities to the neoclassical framework, which further results in the development of particular categories of transaction costs (Marius &

Cuza, 2010). However, these informational asymmetries can be minimized or eradicated using intermediaries. Similarly, to some extent, financial intermediaries tend to overcome these costs, however partially.

In any economy, the banking sector serves as an intermediary that offers households with insurance against idiosyncratic shocks that negatively impact on their liquidity position. Besides, as intermediaries, banks contribute to the advancement of growth and development through their pursuits of capital mobilization for the exploitation of economies of scale, the management of liquidity risk and cross-sectional inter-temporal risk, hence enhancing economic growth and efficiency, and information acquisition regarding managers and organizations, thus improving corporate governance and capital allocation.

Moreover, Ongore and Kusa (2013) assert that the banks carry out the intermediation function by ensuring efficient allocation of a country's resources through the transference of funds from those with no constructive use of it to those with prolific undertakings. This role has especially been fostered by the employment of agency banking, which eases the transferal process where those with excess money deposit them with agent bankers and those with productive endeavors but lack the capital access the deposited cash through the agents. In this context, agent bankers' function as financial intermediaries, hence affording both those in need of financing and those requiring the deposition of extra funds, the convenience of accessing these services in areas where typically banks would not access.

The financial intermediation theory backed the study's dependent variable, the financial inclusion of commercial banks in Siaya County. The theory explained the various functions

of agent bankers in serving as financial intermediaries and reaching various populations hence helping explain how commercial banks improve financial inclusion. Alternatively, the theory's discussion of how agency banking mitigates information asymmetries and minimizes operation costs helped inform the cost of agency banking variable.

2.2.2 The Agency Theory

The proponents of the agency theory include Stephen Ross and Barry Mitnick, who independently proposed the theory of agency(Mitnick,1998).This theory is predominantly employed in the description of the interactions or the association between principals and agents. Specifically, the theory is founded on the concept of principal-agent relationship, where the comprehension that the agent will represent and act in place of the principal, whereas a principal, in succession, reposes confidence and trust in the agent (Afande & Mbugua, 2015). The initial proposition of the agency concept is traced back to the 1960s and 1970s, where the concept was employed in broadening the issues relating to the resolution or explanation of the agency problem as well as risk-sharing (Jensen & Meckling, 1976). Since its adoption, however, this theory has been subjected to numerous critiques, particularly due to its assumption of simplistic contractual agreements of agent and principal, when in actuality, the agency relationship is formed by complex issues (Armstrong, 1991). Nonetheless, the theory's generality is perceived as unquestionable, an aspect that has resulted in its extensive adoption.

The agency theory is particularly applicable in understanding the relationship between banks (principal) and agent bankers (agent). In recent years, commercial banks have understood that financial services provision to remote areas and the rural population is somewhat impossible through the use of typical branch networks. As such, they have

involved third parties, including retail outlets, to act in their place and expedite the facilitation of basic banking services like cash withdrawals, deposits, account opening, among other services. This involvement of various agents and the adoption of this banking model results in the development of principal-agent relationship. As a result, the commercial banks compensate the agents satisfactorily through the transactional commissions, thus encouraging more entities to gain the willingness to become agents for the specific bank. According to Wendel and Williams (2001), agent businesses have offered better profitability to commercial banks by enhancing financial inclusion. Consequently, the increase of agents within a particular area enables the residents to have improved access to banking services, for most of the outlets involved in agency banking remain open past the bank working hours, as well as the avoidance of queuing in banks.

The agency theory backed up the objectives 'to analyze the impact of time-saving of agency banking on the financial inclusion of commercial banks in Siaya County' and 'to assess the impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County.' The theory's association of agency banking to third parties and numerous agents to remote areas helped explain how agency results in time-saving by serving more customers compared to conventional banking, thus impacting the banks' financial inclusion. Besides, the theory attributed agency banking to longer operating hours compared to conventional banking, which could explain the impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County.

2.2.3 Bank Led Theory

Lyman, Ivatury, and Stachen (2006) universalized this theory by stressing the significance and role of an agent who functions as a link between the customers and the banks. In this context, the retail agents undertake the role expected of the bank and have direct contact with the bank's customers (Jenevieve & Anyanwaokoro, 2017). Besides, the bank remains the ultimate financial services provider, the institution that stores and maintains the customers' accounts as well as responsible for the development of financial services and products and distributing them to the retail agents, who are in charge of offering the various services and products to the customers.

This theory offers a definite substitute to the regular branch-based banking because clients carry out financial transactions at diverse retail agent settings as opposed to bank employees or bank branches. As such, this model results in the substantial increment of financial services outreach by the employment of various trade partners and delivery channels, such as online and mobile phone banking, which might be considerably cheaper than the bank-based channels (Gichuki & Jagongo, 2017). Moreover, these retail agents are obligated to offer cash-in/cash-out transactions, account opening processes, and in some instances, service and identify loan customers. As such, this theory supports the objective, 'to establish the convenience levels of obtaining agency banking products in Siaya County' for it presents agency banking as a better, cheaper, and a more accessible than branch-based banking, hence making the former option more convenient, especially for people residing in rural areas.

2.3 Empirical Review

2.3.1 The Impact of the Cost of Agency Banking on the Financial Inclusion of Commercial Banks

Nyota and Muturi (2019) analyzed the impact of agency banking features on Kenyan commercial banks' financial performance. The study adopted a descriptive case study design and questionnaires to collect data from 88 Equity bank agents and staff. The study findings showed that the agency banking model has been identified as a cost-effective agency banking network, for it permits customers to access banking services in shops and retail outlets, especially in remote, formerly unbanked territories. Besides, agency banking provides customers with normal; banking services such as the issuance of mini bank statements, funds transfer, pension payouts, salary payments, loan repayment, and disbursement, as well as cash withdrawals and deposits all through shared infrastructures. This study focused on one bank.

Kanyugi et al. (2019) investigated the effect of banking agency adoption on commercial banks' deposits. The study findings established that running agent banking systems is three times cheaper than bank branches' operation, hence resulting in cost savings. Besides, the study found that the cost-saving attribute of agent banking systems stems from the fact that the use of this model in serving customers eradicates the need for investing in new infrastructure. The employment of agency banking also decreases the costs of operation by lowering the acquisition costs, especially for mobile wallets and mobile-enabled agents.

Odhiambo and Ngaba (2019) argued that the agency banking model results in a minimization in the cost-to-serve by utilizing low-pay specialists to serve customers within their neighborhoods. Mwende, Bichanga, and Mosoti (2015) stressed that the agency

banking model has radically decreased the financial services delivery costs to the unreached communities. In this context, agency banking addresses the two primary issues of access to finance, including the cost of dealing with the low-value transactions and the cost of physical presence or roll-out. The banking networks address these problems by leveraging existing third-party agencies' networks for account opening and cash transactions and through carrying out all financial transactions online. Besides, this significant cost minimization generates the chance to substantially multiply the fragment of the populace with formal finance access, with a specific focus on the individuals residing in rural areas. Similar to Olwande (2018), Mwende, Bichanga, and Mosoti (2015) establish that agency banking is connected to a reduction in operating costs because it does not require the erection of new physical banking infrastructure for serving customers and due to its capacity to minimize the heavy costs associated with serving low-value accounts.

The study by Rahman (2017) complements the findings of Mwende, Bichanga, and Mosoti (2015) by providing a deeper analysis of the costs incurred in conventional banks in comparison to the expenses incurred with this model. First, it verifies that the model is three times cheaper to operate and establish compared to conventional banks. These decreased costs are attributed to the fact that using agents takes advantage of facilities already in place, hence reducing costs for financial service providers for they use existing retail outlets as well as the available workers. Nonetheless, the study also establishes that despite that the agency banking model is associated with low fixed costs, the setting incurs high variable costs from commissions to communications and agents as well as substantially higher fixed financial costs per transaction. Specifically, the study discovered

that the establishment of an agency banking model costs 2 to 4 percent of a bank branch cashier operation expenditure.

On the other hand, Anyumba and Makori (2018) assert that the proximity of agent bankers to the customers enables this model to benefit from extra transactional revenue sources. Particularly, the study argues that by bringing the agency banking systems within the customers' neighborhoods enables the agents to profit from extra revenue linked to the agent-customer interactions. The study further states that although the same services can be obtained in banks, customers from informal settlements and rural regions have a higher probability of visiting an agent banker instead of a bank in search of help with financial transactions and other banking services.

According to Watiri (2013), the decreased costs of operations linked to agency banking are generated by the fact that the only cost that the bank incurs in setting up an agency banking system is that of branding the outlets. In this context, the banks save money that would otherwise be spent on hiring sales personnel and advertisement. These responsibilities are left to the agent who receives payments based on the number of accounts opened and transactions, thus forcing them to focus on increasing traffic into their outlets. Therefore, in addition to enhancing banking networks' reach, the agency banking model has also decreased the cost of banking to customers as well as rationalized the banks' operating expenditure.

Dzombo, Kilika, and Maingi (2017) term the agency banking model a low-cost alternative to conventional banking services. This study attributes the agency banking model's low operating costs to the actuality that banks do not incur the fixed operating costs from equipment and facility maintenance. Consequently, this establishment decreases the

operating costs from client management for the involved bank alongside minimizing the portfolio risk. The study further asserts that within the bank context, the fixed employee salaries substantially raise a bank's operating expenditure, while contrarily, in the agency context, the agent receives variable commissions based on revenue streams, which significantly decreases the economic risk for the bank.

Besides the setup and operating costs, Mas (2018) indicates that this system results in reduction in investment and administrative costs. The study argues that contrary to the opening of a bank branch, the implementation of an agency banking model does not mandate formal approval. In the context of a bank branch, the study states that is not only formal approval required but also physical inspection from a central bank representative is required, which may not only result in opening delays, especially in rural regions but also increase the administrative costs.in addition to the costs incurred due to administrative processes, the regulations imposed on the banking industry impacts on the efficient branch set up, and hence may significantly affect the branch's profitability and investment costs. Specifically, the facilities and construction of bank branches are subjected to regulated security requirements that tend to be attained at particularly high costs, thus causing considerable investment costs. These requirements comprise of the building's minimum size, its physical layouts, and building characteristics, which not only result in inefficiencies that translate to extra costs for the bank but also limit innovation (Mas, 2018). Oppositely, when operating through agents, the banks utilize existing infrastructure, thus eliminating the need for investing in new facilities.

2.3.2 The Impact of Time-Saving of Agency Banking on the Financial Inclusion of Commercial Banks

Mwende, Bichanga, and Mosoti (2015) investigated the significance of agency banking in offering banking services in Kenya. The obtained results showed that before the adoption of the agency banking model, business owners and other individuals used to waste a significant amount of time in search of a bank. This problem was predominantly experienced by individuals living in remote areas, especially with small businesses, where they were forced to move from their areas of operation to towns in search of banking services. The study incorporates the stories of small enterprise owners, such as salon owners, living in an informal settlement, and the losses incurred due to the exhaustion of work hours in transit from their workplaces to the banks, and vice versa. For these individuals, Mwende, Bichanga, and Mosoti (2015) postulate that the availability of agency banking has worked in their favor, for the time they used in transit is now being used in serving customers.

Agency banking has also boosted customers access to banking services within their environs, thus eliminating the need for wasting time queuing in the banking halls. Before the adoption of the agency banking model Kitali, Chepkulei and Shibairo (2015) state that customers spend a substantial amount of time in queues waiting to pay school, pay their utility bills, or to undertake other financial transactions. In contrast, the utilization of agency banking helps customers in time-saving for there are small to no queues and because banking agents are equipped with a mixture of Personal Identification Number (PIN) pads, barcode scanners for scanning bills for bill payment transactions, mobile phones, point of sale (POS) card reader, and at times Personal Computers (PCs) that link

with the bank's server by use of personal dial-up as well as other data connection, thus speeding up the transaction process and the customers' access to their bank accounts.

2.3.3 The Impact of Serving Hours of Agency Banking on the Financial Inclusion of Commercial Banks

Ndengu and Njeru (2014) assert that the competition for customers within the Kenyan banking industry has driven a significant number of banks to broaden their serving hours to late evening. Similarly, a number of lenders have been currently serving their clients over public holidays and the weekends. As of 2014, some banks such as the ABSA Plc formerly Barclays Bank of Kenya, the NIC, Diamond Trust, ABC, and the Standard Chartered had extended their working hours from the conventional banking hours of between 9 a.m. and 3 p.m. to between 7 a.m. and 8 p.m. as of the time of the study's publication; the DTB had also announced the opening of a new branch within Nairobi to serve customers at longer hours than the other branches. The study further attributed the extension of banking operating hours as a manner of accommodating the customers' busy schedules and targeting late-night shoppers, particularly in high-income areas.

In addition to the extension of banking hours, the Kenyan banks are also taking advantage of the agency banking model for increasing their serving hours. Specifically, most banks have been involved in operating agency banking models within outlets, such as supermarkets, that open up to late at night or operate for 24 hours. Besides, in a study on Kalinda, Rukangu, and Rintaungu (2016) discovered a positive connection between the agency banking adoption and flexibility of operating hours for the banks. The study established that the agency banking model provided flexibility in numbers of operating hours for contrary to formal banking systems, the agent bankers work past the standard

business hours, work during weekends and holidays, thus boosting service delivery, which enhances the convenience levels attributed to agency banking.

2.3.4 The Impact of the Convenience of Agency Banking on the Financial Inclusion of Commercial Banks

Nyambura, Ambrose, and Ndede (2018) posit that agency banking offers high degrees of convenience to customers in forms of bringing the banking services nearer to the consumers and extending the hours of banking. Regarding proximity to customers, Kithuka (2010) undertook a study aiming at determining whether the distance, cost of transport, and time that customers spend in their search for accessing bank services affect their decision on whether to visit the specific agent or bank. The study's findings ascertained that distance plays no critical role in the rates of customer transactions. Nonetheless, these findings do not essentially mean that proximity has zero impact on agency adoption. On the other hand, Karimi (2018) found that proximity to an agent banker shapes the customers' perceptions of a bank's degree of convenience. In this context, agency banking affords convenience to customers by enabling them to gain access to the standard banking services such as checking of balance, cash withdrawal, and cash deposit fittingly and within the comfort of their environs.

In addition to proximity, Muasya, and Kerongo (2015) claim that agency banking systems offer convenience to customers by providing them with diverse alternatives for carrying out financial transactions and other banking services. Particularly, the agency banking system has numerous delivery channels, with the inclusion of a bank-provided account connected to a mobile wallet, mobile wallet, mobile phone-enabled agents, and POS-enabled bank agent alternatives. The mobile wallet concept consists of an agent being

managed by a telecommunication business, where mobile phones are employed in customer identification and in the provision of mobile wallets, which are store-of-value accounts supported by bank deposits. Besides, these mobile wallets are significant in the storage of electronic monetary value as well as in the receipt and sending of electronic money. Concerning the mobile-phone agency, this method comprises an agent managed by a given bank

Kalinda, Rukangu, and Rintaugu (2017) asserts that the convenience of access provided to customers by the agency banking model represents one of the most attractive features to the customer. This statement is especially true for the persons residing in rural areas for the concept of agency banking alleviates their struggles to access banking services due to the high costs, long distances, and the poor infrastructures found within these areas. Regarding the convenience of agency banking, Wakaba and Wepukhulu (2019) ascertain that the model is convenient for people living in rural regions, for they perceive the premises as less intimidating compared to formal banking settings. Within the agency banking settings, the study states that the customers feel less apprehensive about withdrawing small amounts of money and inquiring about their bank balances, especially if considerably low. According to Afande and Mbugua (2015), the primary impediments for individuals from the low social classes in accessing financial services include product design factors, such as minimum account balances, regulatory factors such as the need for identity documentation, as well as socio-economic factors like geography, irregular income, and education. Of these factors, low income and education are identified as the main barriers to these people's formal banking services' access. In the agency banking model, however, the rural-based customers tend to obtain the financial services from familiar and

experienced agents, thus elevating these customers' likelihood to visit these outlets for their financial services. As a result, the development of premises where these individuals' low education levels and income does not affect their capacity to obtain access to financial services, significantly improves the perceived degree of customer convenience.

In the financial institutions' context, the adoption of the agency banking model affords these businesses convenience in different manners. Firstly, the agency banking model is perceived as a more convenient channel in comparison to other banking alternatives, for it assists in the diversion of the existing customers from the frequently crowded branches. Dzombo, Kilika, and Maingi (2017) state that agency banking systems offer more convenient and complementary services to financial institutions, hence enabling banks to divert existing customers from the congested branches. Contrarily, Lyman, Pickens, and Porteous (2018) state that despite the establishment of numerous agency banking establishments, banking halls have remained congested, and long waiting lines are still common in most banking premises. Similarly, Mas (2018) claims that although agency banking models are associated with high convenience levels, finding queues of individuals waiting to be served by an agent is a rare occurrence, whereas long waiting lines within the banking halls remain a common occurrence. As such, Mas (2018) suggests that little has changed because of agency banking systems introduction for the long lines within Kenyan banks have persisted. Musau (2013) attributes these long lines within banking premises to the location of agencies in remote and high-risk areas and the imposition of high charges on customers, thus making them avoid these settings and prefer visiting banks.

Secondly, this model is considered a convenient approach of serving customers within the rural regions for reaching these clients by use of conventional banking branches is

substantially expensive given that transaction volumes and numbers do not cover a branch's cost (Jaldesa, Muturi & Sumba, 2015). Finally, Ogutu and Fatoki (2019) argue that the use of agency banking models provides financial institutions with the opportunity to expand and reach a broader market, thus offering the convenience of increasing a bank's customer base at an economical manner.

On the contrary, Kanyugi et al. (2019) state that agency banking provides a high level of reliability to customers, which enhances the perceived convenience levels. Specifically, the agency banking model customers are considered to be driven by its reliability and convenience for these systems are widespread throughout the country in such a manner that people can gain financial services in the most remote and smallest market centers. Particularly, a 2009 survey by FSD-K uncovered that, on average, the closest agent to customers in different regions was reachable at transport costs of about 15 shillings and in less than 12 minutes (FSD-K Annual Report, 2010). On the contrary, a survey by Fin Access discovered the nearest bank branch for 60 percent of the Kenyan population was more than 30 minutes away from the customers and cost them at least 50 shillings to reach (Fin Access, 2013).

2.4 Summary of Literature and Research Gap

Table 2.1Summary of Literature

Writer	Heading	Results	Area of Improvement	Emphasis of this Paper
Afande *et al (*2015)	Role of agent banking services in financial inclusion promotion.	A positive correlation between financial inclusion and factors such as the security, costs, geographical coverage, and accessibility of liquidity of agency banking	The study only examined selected commercial banks in Nyeri County.	Focus is on all financial institutions making use of agents in Siaya county
Anyumba *et al* (2018)	Effect of employing agency banking on the Kenyan SME'S performance.	Positive correlation between the financial performance of SMEs and loan application, account opening, and intermediary bank transaction services.	The study generally focuses on SMEs, and as such, the results may not be applicable in the banking sector.	Focus is on all businesses employing agency banking.

Dzombo, *et al* (2017)	The effect of branchless banking strategy on Kenyan Commercial Banks' financial performance.	Electronic and agency banking have a significant negative impact on banks' performance, but when the electronic and agency banking channels are utilized together as a multichannel approach, a positive impact on financial performance is recorded.	Focused on a single component of financial performance, return on asset	The study focusses on 4 variables of agency banking.
Jaldesa, *et al* (2015)	Factors impacting agency banking usage among entrepreneurs.	Found a significant link between agency banking services usage and awareness levels and costs.	The study is limited to the West Pokot sub-county.	The study focusses on all the banks with agency banking in Siaya county
Kalinda, *et al* (2017)	Agency banking services' influence on Equity Bank' service delivery.	Agency banking adoption in rural areas creates ease of access to financial services.	The study is limited to one bank, Equity Bank Kenya.	The study focusses on all the banks with agency banking in Siaya county

Kitali, *et al* (2015)	Agency banking's impact on customer satisfaction.	Most customers are satisfied by agency banking and prefer these outlets to the bank itself.	Use of a small sample, thus affecting generalizability	The sample size is large enough to be used for generalization.
Mwende, *et al* (2015)	Investigation on agency banking importance in Kenyan banking services' provision.	Agency banking is efficient in regard to timesaving, transaction and transport cost-saving, and increases accessibility to financial services.	The study is limited to Equity Bank in Kitui County	The study focusses on all financial institutions with agency banking in Siaya county
Nyambura *et al* (2018)	Agency banking transactions on Small-Scale Enterprises' primary business financial performance.	Agency banking boosts the outlets' income and customer base	The study is limited to a few businesses in Kiambu County.	It focusses on all businesses with agency banking
Nyota *et al* (2019)	Effect of agency banking features on Kenyan Commercial Banks' financial performance.	A strong connection between financial performance and agency banking factors such as	The study is limited to one bank, Equity Bank Kenya.	The study focusses on all financial institutions with agency banking in Siaya County

		market share and accessibility of providing financial services.		
Researcher (2020)	The role of agency banking in promoting financial inclusion in Siaya County.	A lack of studies focusing on agency banking and financial inclusion in Siaya County	Information limitation	The study will provide information on agency banking and financial inclusion in Siaya county.

Evaluation of existing works on the subject matter reveals that despite that the agency banking and financial inclusion area of research has been significantly covered in existing studies, some topics such as the extent to which agency banking adoption has affected serving hours, are inadequately addressed. Besides, the assessment of existing studies also showed the absence of studies focusing on the Siaya County context. For bridging this gap in the literature, the current study focused on agency banking and financial inclusion within Siaya County.

2.5 Conceptual Framework

A graphic depiction of the linkage of the dependent and independent variables. The independent factors in this research included the cost, time-saving, serving hours, and convenience associated with agency banking. The dependent variable, which served as a metric of financial inclusion, was the number of transactions conducted each day.

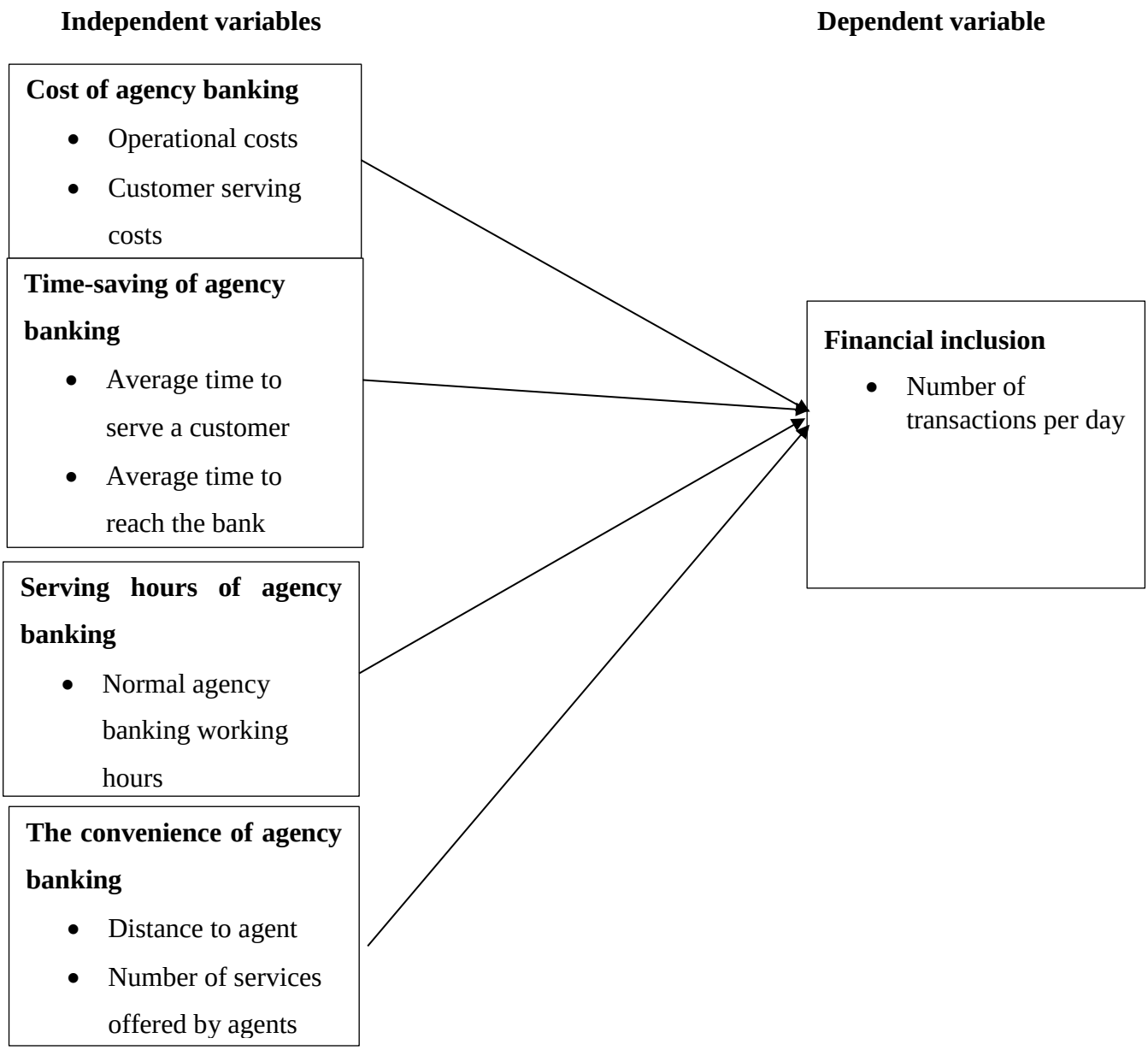


Figure 2.1: Conceptual Framework

Source: Researcher (2020)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter elaborates the procedure employed in the study of agency banking and financial inclusion within Siaya County. Here the researcher presents a number of the methods employed in collection of data. The section is composed of five sub-segments, that is research design, target population, sampling design, and the data collection and analysis techniques and tools.

3.2 Research Design

An explanatory research design was utilized in the identification of the variables linked to agency banking and determination of how the various variables impact on financial inclusion in commercial banks in Siaya County. The selection of the explanatory research design is due to the ability to explain the impact of agency banking on the financial inclusion of commercial banks in Siaya County. Notably, the explanatory research design helped examine if a change in the cost, time-saving, serving hours, and convenience of agency banking caused changes in the financial inclusion of commercial banks in Siaya County.

3.3 Population Under Study

This is the entire population from whom data is collected (Banerjee & Chaudhury, 2010). The study's target population encompassed 370 registered bank agents in Siaya County as

of December 2019. Siaya County had 370 agents comprising of 150 from KCB, 100 Co-operative Bank agents and 120 Equity Bank agents in 2019.

Table 3.1Target population

Bank	Number of agents	Composition %
KCB	150	40
Equity	120	32
Coop	100	28
Target population	**370**	**100**

Source: 2019 FinAcess Report

3.4 Sampling Design and Sample Size

Munoru (2016) states that sampling involves the picking of a few subjects for research in a way that the selected subjects are a representation of the larger population from which they were chosen. The sample size should be efficient, reliable, flexible, and representative of the whole population (Sigel, 2003). This study adopted proportionate random where 50% represented the 0.2 sampling ratio obtain froma tota of 74 respondends of registered bank agents in Siaya County.

Table 3.2 Sampling design

Bank	No of agents	Sampling ratio	Sampling Size
KCB	150	0.2	30
Equity	120	0.2	24
Coop	100	0.2	20
Total	**370**	**0.2**	**74**

Source: 2019 FinAccess Report.

3.5 Data Collection instrument

The tool utilized for data collection was a designed questionaire . It was organized in two sections . section A collected data that patained the demographics of participants .section B collected data on Independent variable based questions where effect of involvement of stakeholders in banking services and how efficient these processes encourage other non memners to get involelved are tacled for improvememnt of banking services.

These methods of study predominantly adopted primary data for not only is it less likely to be mis-presented in comparison to secondary data. It also offers the researcher some level of confidence knowing that the data is of integrity with minimal or no bias (Lowry, 2015). It also enables one to custom make the research questions in such a manner that the research objectives are well covered (Curtis, 2017).

This study employed the use of questionnaire for data collection because it gathers a lot of data. Sansoni (2011) further posits that questionnaire are not only effective but also less time-consuming. The questionnaire consisted of closed ended questions accompanied by a Likert scale. The questionnaires were designed in way to gather information with regards to the impact of agency banking on the financial inclusion of commercial banks in Siaya County through the model's costs and its ability to facilitate time-saving, a change in serving hours, and convenience levels of obtaining agency banking products. Finally, the questionnaires were administered to 74 registered bank agents in Siaya County through e-mail after prior telephone conversations with potential respondents.

3.6 Data Collection Procedure

After obtaining authorization documnents from kenyatta university .nacosti and an introductory letter to management, I communicated to the leaders of the target departments in various bank services providers an informed them about the study. Approvals from the county research committee werealso obtained prior to commencement of data collection.an appropriate appointment datewa sourght fromeach facility. Two research assistants assiossted in administration of the questionnaire.they were adequately trained on how to interact,guide the respondends as well as administer questionaires adhering to th stipulated ethical procedures of conducting research a cover letter accompanied every questionnaire. This study included the pilot testing of the questionnaire on a selected sample. Validity was used to measure extent to which results gatheredcould be represented phenomenically (Robinson 2002). This was measured by expert opinion from lecturers and integrating objective questions in the questionnaire. Once the pilot test is completed, the questionnaire was adjusted where needed, before the main study. The main study then took place whereby the questionnaire was administered on the sample of 74 registered bank agents in Siaya County. The study made use of 0.7 Cronbach alpha value threshold.

3.7 Data Analysis

Data was analysed after clean up ,reduction,differentiation and coding .clean up was done by editing, tabulation and coding to detect the errors . coding and keying into a computer was then done on the SPSS for analysis. Appropriate codes were created for different variables and verified for possible erroneous enrtries before the stage of analysis . version

22 of the statistical packaging for the social sciences (SPSS) was used for case of managing, analysing and storing data.

The data was then manipulated through sorting and filtering processes to compute standard deviation and mean. This was followed by tabulation and summarization of the data. For descriptive and quantitative analysis, the study utilized central tendency measures that is standard deviation, percentages and mean.

The research adopted a quantitavive approach as prescribed by creswell ,(2011). Descriptive as well as inferential statistics procedures were applied. Descriptive statistics utilized central tendancy measurements of mean, median and mode , frequencies,percentages and standard deviation . inferential statistics on the other hand employed pearson's correlation as wellas multiple linear regression to find dependend and independent variable correlation . the association was measured as strong if R ≥0.5, Moderatetly strong if between 0.3 and 0.49, weak if <0.29 and 0 if there is no relationship.

The analyzed statistics were presented in charts,tables,graphs and histograms

Multiple linear regression was applied to establish the influence of independent variables on the dependent variable. The equation is as depicted below

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

$\mathrm{Y} = \text{Financial inclusion}$
$\mathrm{X}_1 = \text{Cost of agency banking}$
$\mathrm{X}_2 = \text{Time} - \text{saving of ageny banking}$
$\mathrm{X}_3 = \text{Serving hours of agency banking}$
$\mathrm{X}_4 = \text{The convinience of agency banking}$
$\beta_0 = \text{Constant}$
β_1, β_2, β_3, and β_4= Regression Coefficients, □ is error term

3.7.1 Diagnostic Tests

The study carried out diagnostic tests at a 95 percent confidence level to facilitate drawing reliable conclusions from the gathered data. These tests entailed autocorrelation and multicollinearity tests.

3.7.1.1 Autocorrelation test

The Durbin-Watson test comprises the most common approach to testing autocorrelation from a regression analysis. The test generated a test value ranging from 0 to 4. Values near 4 suggest a larger degree of negative autocorrelation. Oppositely, values close to 0 depict a larger degree of positive autocorrelation, whereas those nearer to the middle infer less autocorrelation. Based on this interpretation, the data utilized in the study was found to have a positive autocorrelation because the autocorrelation value was closer to 0, as exhibited in Table 3.3 below.

Table 3.3 Autocorrelation Test

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.722[a]	.521	.485	.57100	1.113

a. Predictors: (Constant), cost of agency banking, timesaving of agency banking, serving hours of agency banking, convenience of agency banking

3.7.1.2 Multicollinearity test

The variance inflation factor (VIF) encompasses the most used employed approach in research in evaluating multicollinearity in a regression model. The VIF technique finds correlation between independent variables and ascertains the strength of the correlation. VIFs commence at 1 and lack an upper limit. A value of 1 suggests the absence of

correlation between the specific independent variable and other independent variables. Values between 1 and 5 suggest a moderate correlation, which is not severe enough to require corrective measures. Values above 5 depict critical multicollinearity levels.

Table 3.4 demonstrates the obtained VIF values.

Table 3.4 Multicollinearity test

Model	Collinearity Statistics	
	Tolerance	VIF
Cost of agency banking	.814	1.009
Time-saving of agency banking	.821	1.104
Serving hours of agency banking	.766	1.326
Convenience of agency banking	.819	1.228

a. Dependent Variable: financial inclusion

Examining the VIF values in Table 3.2 above indicates that the values were either approximately 1 and below, which suggested either an absence or a moderate correlation. Therefore, there was no need for corrective measures.

3.8 Operationalization and Measurement of Variables

Table 3.5 Operationalization and Measurement of Variables

Variables	**Dependent /Independent**	**Indicators**	**Measuring Scale**	**Data analysis technique**
Financial inclusion	Dependent	- Number of transactions per day	Nominal Ordinal	Frequencies and percentages Mean Standard deviation
Cost of agency banking	Independent	- Operational costs - Customer serving costs	Nominal Ratio	Frequencies and percentages
Time-saving of agency banking	Independent	- Average time to serve a customer - Average time to reach the bank	Nominal Ratio	Mean Standard deviation
Serving hours of agency banking	Independent	- Normal agency banking hours	Nominal Ratio	Mean Standard deviation
The convenience of agency banking	Independent	- Distance to agent - Number of services offered by agents	Nominal Ordinal	Frequencies and percentages

3.9 Ethical Considerations

The study ensured that the required ethical consideration were met. Consent was sort from all respondents and were re assuredthat all the information is solely meant for research. Confidenciality was ensure by ensuring anonymity of questionaires where no names were captured. The researcher sort to observe privacy of all matters sensitive to participants in the form of beliefs and opinions. This research did not interfere with human rights and any cultural values of the society under study (Mugenda, 2003).

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The section brings forth analysis of data. This is presented in tables and interpreted in various ways. The chapters cover the feedback rate, demographic analysis, descriptive analysis of the data as per the study objectives and the regression analysis.

4.1.1 Response Rate

Table 4.1 displays the questionnaire response rate.

Table 4.1 Response Rate

	Frequency	**Percentage**
Responded	58	78.4
Non-response	16	21.6
Total	**74**	**100**

Of the 74 questionnaires distributed to the sampled respondents, 58 respondents responded and returned the questionnaires representing a rate of 78.4%. The other 16 questionnaires were either not filled or unreturned. The representation of the obtained questionnaire is however considered adequate for analysis as supported by Mugenda & Mugenda (2012), an outcome in the range of between 50-60% is moderate and can be used for data analysis while above 60% is good for research analysis.

4.2 Demographic Analysis

4.2.1 Gender of the Respondents

Feedback on gender is displayed in Table 4.2

Table 4.2 Gender of the Respondents

	Frequency	Percent
Male	20	34.5
Female	38	65.5
Total	**58**	**100.0**

The findings in Table 4.2 show that the majority of the respondents (65.5%) were female and 34.5% were male. The findings imply that most of the agent banking operators are female.

4.2.2 Bank Represented

The subjects were requested to tick the bank they represented. The responses on the bank represented are in Table 4.3.

Table 4.3 Banks Represented

	Frequency	Percent
KCB	25	43.1
COOP	14	24.1
EQUITY	19	32.8
Total	**58**	**100.0**

Table 4.3 shows that 43.1% of the respondents were KCB agents, 32.8% were equity agents and 24.1% were cooperative bank agents.

4.2.3 Education Level of the Respondents

The study also sought the respondents' highest educational level. The responses with respect to education level are in table 4.4.

Table 4.4 Education Level of the Respondents

	Frequency	Percent
Post Graduate	2	3.4
Under Graduate	20	34.5
College	31	53.4
Others	5	8.6
Total	**58**	**100.0**

As in Table 4.4, 53.4% had college education, 34.5% were undergraduates, 3.4% were postgraduates and 8.6% had other levels of education.

4.2.4 Length of Service

Timeframe as an agent as well was sought by the study. The results are shown in table 4.5.

Table 4.5 Length of Service

	Frequency	Percent
less than 1 year	7	12.1
2-3 years	13	22.4
Over 3 years	38	65.5
Total	**58**	**100.0**

From the results in table 4.5, 65.5% served for over 3years, 22.4% for 2-3 years, and the least 12.1% for less than one year.

4.2.5 Category of the Respondents in the Business

The study also evaluated the category of the responders in the business. Table 4.6 presents outcome.

Table 4.6 Category of Respondents in the Business

	Frequency	Percent
Business owner	8	13.8
Employee	50	86.2
Total	**58**	**100.0**

Findings pointed that most of the respondents (86.2% were employees and a few owners (13.8%).

4.3 Descriptive Analysis

4.3.1 The Cost of Agency Banking

To establish the impact of the cost of agency banking on the financial inclusion of commercial banks in Siaya County, the respondents were requested to outline the costs that agency banking has been able to save as a result of cost sharing. The findings are displayed in table 4.7.

Table 4.7 Cost of Agency Banking and Financial Inclusion

	Yes		No	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Rent	56	96.6	2	3.4
Security	41	70.7	17	29.3
Salaries	52	89.7	6	10.3

The findings as exhibited in Table 4.7 show that this model of banking has led the respondents to realize savings as a result of cost-sharing where 96.6% were able to save on rent, 70.7% were able to save on security costs and 89.7% were able to save on salaries. The findings suggested that agency banking reduced the commercial banks' operational

costs. Similarly, Mwende, Bichanga, and Mosoti (2015) posit that agency banking is linked to a decrease in operating costs as there is no need for a banking hall or structure.

The study further sought the respondents' level of agreement with the following statements on costs. Table 4.8 display the findings.

Table 4.8 Statements on Costs

	SD	D	N	A	SA	Mean	Std. Deviation
The amount of money spent on my business before adopting agency banking would have limited my growth	2	3	3	42	8	3.88	0.84
The model also led to reduced operating costs because of cost sharing.	0	0	3	44	11	4.14	0.48
The reduced expenses due to shared costs has in turn led to higher margins in terms of profit.	0	0	4	39	15	4.19	0.54

From the study, the respondents agreed that the reduced costs attributed to shared business running costs has in turn increased on their profits as shown by a mean of 4.19 and that agency banking has led to a decrease in expenses as illustrated by an average of 4.14. The respondents further concurred that the amount of money spent on their business before adopting this model would have stunted their business's growth as depicted by a mean of 3.88. The results are consistent with those established by Kanyugi et al. (2019) who indicated that operating agent banking systems is three times cheaper than a bank branch, hence resulting in reduced costs.

The respondents were further asked whether agency banking has reduced their cost to serve. The findings were as presented in Table 4.9.

Table 4.9 Agency Banking on the Cost to Serve

	Frequency	Percent
Yes	58	100
Total	**58**	**100**

As shown in Table 4.9 all the respondents indicated that agency banking has reduced their cost to serve. The results mean that agency banking has reduced the commercial banks' customer serving costs.

The study sought the approximate percentage (%) reduction in expenses because of adoption of agency banking alongside the primary business.

Table 4.10 Percentage (%) Decrease in Costs

	Frequency	Percent
0-10%	18	31.0
11-20%	23	39.7
21-30%	12	20.7
Above 30%	5	8.6
Total	**58**	**100.0**

Table 4.6 indicates most businesses having a 39.7% decrease in costs realized because of incorporating agency banking alongside the primary business, 31% ad 0-10%, 20.7% had 21-30% while only 8.6% had over 30% decrease. Similarly, Odhiambo and Ngaba (2019) state that the agency banking model leads to reduction in customer serving costs.

4.3.2Time-Saving of Agency Banking

Table 4.11 Extent Which Agency Banking Saves Time for Customers

	Frequency	Percent
Large Extent	36	62.1
Medium extent	19	32.8
Small extent	3	5.2
Total	**58**	**100.0**

Most of the participants (62.1%) confirmed that reduction in time used influences the adoption of agency banking instead of walking into the banking halls to a large extent, 32.8% medium extent and 5.2% small extent. The findings demonstrate that reduction in time influences the adoption of agency banking compared to walking into the banking halls to a large extent. The findings concur with Kitali, Chepkulei and Shibairo (2015).

The study sought the average time it takes to serve a customer using agency banking model.

Table 4.12 Average Time Taken to Serve an Agency Banking Customer

	Frequency	Percent
0-5 minutes	53	91.4
6-10 minutes	5	8.6
Total	58	100.0

The findings show that over three-quarters of the respondents (91.4%) indicated that the average time taken to serve an agency banking customer is 0-5 minutes while 8.6% indicated it is 6-10minutes. The findings infer that the average time taken to serve an agency banking customer is 0-5 minutes.

The respondents further indicated the average amount of time to reach to the bank displayed in Table 4.13.

Table 4.13 Time It Would Take to Reach the Banks

	Frequency	Percent
11-30 minutes	3	5.2
30-60 minutes	19	32.8
Over 60 minutes	36	62.1
Total	**58**	**100.0**

62.1% of the subjects said that it would take over 60 minutes to reach the bank, 32.8% would take 30-60 minutes while only 5.2% would take11-30 minutes to reach the bank on

average. The findings illustrated that majority of the residents in the area would take over an hour to reach the bank in Siaya County.

4.3.3 Serving Hours of Agency Banking

The research required the subjects to pick the normal working hours. Responses tabled below.

Table 4.14 Normal Working Hours

	Frequency	Percent
Less than 6 hours	3	5.2
8-10 hours	20	34.5
Above 10 hours	35	60.3
Total	**58**	**100.0**

On the assessment of the normal working hours, 60.3% indicated above 10hours, 34.3% indicated 8-10 hours and 5.2% indicated less than 6 hours. The findings show that the majority of the agency banking work operators work for over 10hours.

Table 4.15 Extent to Which Long Banking Hours Influence the Use of Agent Banking

	Frequency	Percent
Large Extent	31	53.4
Medium Extent	22	37.9
Small Extent	5	8.6
Total	**58**	**100.0**

The findings on the extent to which long many hours spent in the banking hall influence the use of agent banking as compared to visiting the banks depict that over half of the respondents indicated large extent, 37.9% indicated medium extent, and 8.6% indicated

small extent. The findings demonstrated that many hours spent in the banking halls led to the adoption of agent banking to a large extent.

4.3.4 The Convenience of Agency Banking

To determine the model's role in fostering financial inclusion by raising convenience levels of obtaining agency banking products in Kenya commercial banks in Siaya County, the subjects were required to show their source of motivation to be a bank agent. The responses are shown in Table 4.16.

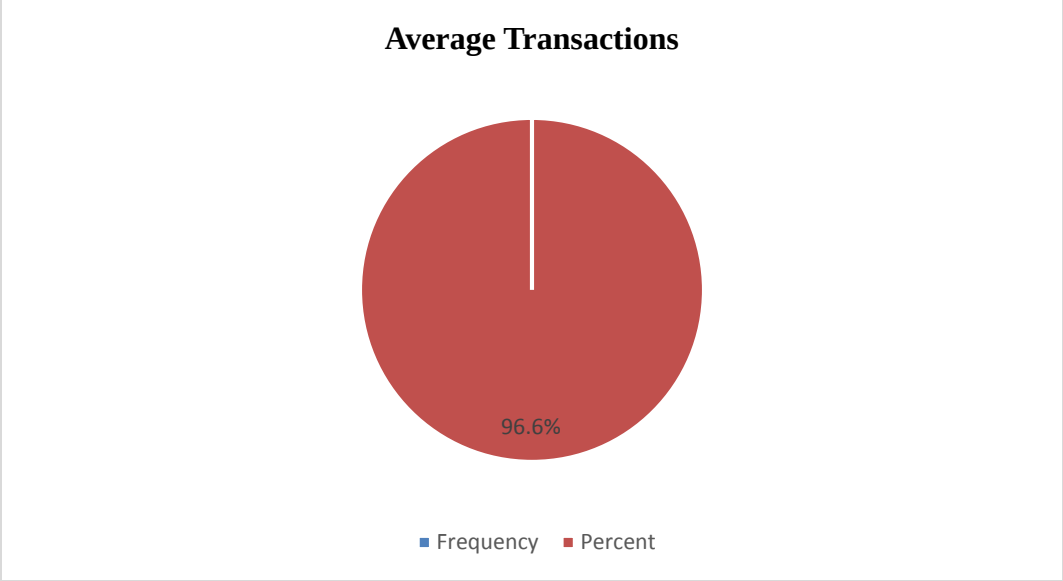
Table 4.16 Convenience Level

	SD	D	U	A	SA	Mean	Std. Deviation
Transaction Fee income	0	0	2	39	17	4.26	0.52
Brings more people into my store	0	0		25	33	4.57	0.50
My customers asked me for it	9	9	12	34	3	3.53	0.82
I want to be linked to a big brand	3	4	28	23	0	3.22	0.80

The majority of the respondents (33) strongly agreed that their motivation to be a bank agent was that it brings more people into their store (mean= 4.57). The respondents were also motivated by transaction fee income as demonstrated by a mean of 4.26. The findings also show that their customers requested them for it as demonstrated by a mean of 3.53. The respondents were uncertain about the need to be linked with a big brand as a source of motivation for being bank agents as shown by a mean of 3.22.

The study further sought the average transactions in a day.

Figure 4.1 Average Transactions in A Day



The findings infer that almost all the respondents (96.6%) indicated that they make 1-50 transactions in a day while 3.4% made 50-200 transactions in a day. The findings demonstrated that on average bank agents in Siaya County make 1-50 transactions in a day.

The research further sought to establish how distance influences the use of agent banking as opposed to visiting the banks. Responses tabled in Table 4.18.

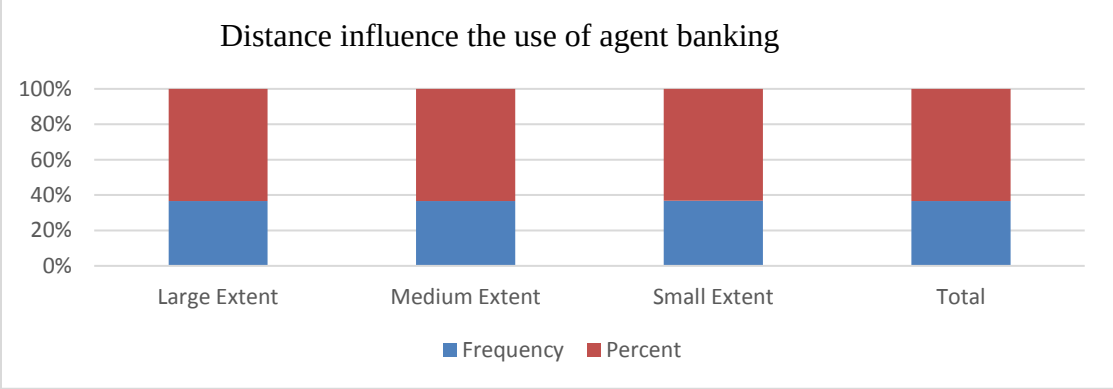


Figure 4.2 Extent to which distance influence the use of agent banking

From the study findings, slightly over half of the respondents indicated that distance leads to the adoption of agent banking instead of visiting the banks to a large extent, 36.2% indicated to a medium extent and only 10.3% indicated to a small extent. The research, therefore, demonstrates that distance leads to the adoption of agent banking model instead of walking into the banks. Similarly, Karimi (2018) established that closeness to an agent banker brings convenience to customers by enabling them access standard banking services.

4.3.5 Financial Inclusion

The research assessed the number of transactions per day in the services provided by agent banking. The responses are provided in Table 4.19.

Table 4.17 Number of transactions per day in the services

Type of Txn	No. of Txns per day	Frequency	Percentage
Withdrawals	0-10	7	12.1
	11-20	36	62.1
	21-30	11	19.0
	Over 30	4	6.9
	Total	58	100
Deposits	0-10	14	24.1
	11-20	35	60.3
	21-30	6	10.3
	Over 30	3	5.2
	Total	58	100
Balance inquiry	0-10	43	74.1
	11-20	12	20.7
	21-30	3	5.2
	Over 30	0	0.0
	Total	58	100
Utility payment	0-10	18	31.0
	11-20	33	56.9
	21-30	5	8.6
	Over 30	2	3.4
	Total	58	100

From the findings, the majority of the respondents (62.1%, 60.3%, 74.1% and 56.9%) indicated that they made 11-20 withdraws, 11-20 deposits, 0-20 balance inquiries, and 11-20 utility payments respectively. The findings indicated the availability and customers' access to numerous services due to agency banking. Similarly, Karimi (2018) found that agencies provide access to standard banking services such as checking balance, cash withdrawal, and cash deposit.

4.4 Regression Analysis

To find out the existing relationship between agency banking and financial inclusion among commercial banks in Siaya county, the study utilized a multiple regression model, the SPSS version 25 to compute the data, and the findings were computed as shown below.

Table 4.18 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722[a]	.521	.485	.57100

a. Predictors: (Constant), cost of the transaction, time saved, serving hours, convenience level

The outcome of the research indicated in Figure 4.2 show the coefficient of determinant R being .722 indicating a strong relationship that is positive between agency banking and financial inclusion in banks in Siaya County. R^2 was explained to be .521 equivalent to 52.1% variance in the dependent variable which in this case was financial inclusion. Agency banking explains 52.1% of the change in financial inclusion in Siaya County. Lastly, the .485 Adjusted R-Square value indicated that the regression model's goodness-of-fit in explaining the changes in the dependent variable (financial inclusion).

The study made use of ANOVA to test for the best fit of the data. The results were as depicted below.

Table 4.19 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.806	4	4.702	14.420	.000[b]
	Residual	17.280	53	.326		
	Total	36.086	57			

a. Dependent Variable: financial inclusion

b. Predictors: (Constant), cost of transaction, time saved, serving hours, convenience level

From the data in table 4.21, the F value was found to be 14.42 with a significant level of p=.000 which means regression model was significant in foretelling the existing link between agency banking and financial inclusion.

Table 4.20 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficient		
		B	Std. Error	Beta	t	Sig.
1(	Constant	4.08	1.216		3.356	.001
	Cost of agency banking	-0.339	0.109	-0.472	3.111	.000
	Time – saving of agency banking	0.458	0.131	0.343	3.505	.001
	Serving hours of agency banking	0.415	0.121	0.371	3.43	.001
	Convenience of agency banking	0.531	0.125	0.453	4.248	.000

a. Dependent Variable: financial inclusion

The results in Table 4.22 gave a beta value of -0.339 on the cost of agency banking implying that an increase in cost of the transaction negatively changed the variable by 33.9%. The time-saving of agency banking variable had a beta value of 0.458, serving hours had a beta value of 0.415 thus a unit rise in serving hours would positively change financial inclusion by 41.5%. This finding indicated a negative association between the cost of agency banking and the financial inclusion of commercial banks in Siaya County. The results also showed a positive correlation between the time-saving of agency banking and the serving hours of agency banking and the financial inclusion of commercial banks in Siaya County. Consistent with the study findings, Kalinda, Rukangu, and Rintaungu (2016) found that a positive correlation between agency banking adoption and flexibility

of operating hours for the banks where the agency banking model provided more operating hours contrary to formal banking systems. Convenience had a beta value of 0.531 thus a unit rise in convenience of agency banking would positively change financial inclusion of commercial banks in Siaya County by 53.1%. The findings correspond to findings by Nyambura, Ambrose, and Ndede (2018) that agency banking offers a high level of convenience to customers in the forms of bringing the banking services close to the consumers and increasing the hours of banking.

Moreover, the findings in Table 4.22 above found a .000 p-value for the cost of agency banking variable, .001 for time-saving of agency banking, .001 for the serving hours of agency banking, and .000 for the convenience of agency banking. These findings meant that a statistically significant relationship existed between the independent variables (the cost of agency banking, time-saving of agency, serving hours of agency banking, and convenience of agency banking) and the dependent variable (financial inclusion) in commercial banks in Siaya County because all the p-values were below the .05 significance level. The p-values also informed decision-making on whether to accept or reject the null hypotheses.

4.5 Hypotheses Testing

H_{01}: The cost of agency banking does not impact the financial inclusion of commercial banks in Siaya County.

The study found a .000 p-value for the cost of agency banking and financial inclusion. This p-value was below the .05 significance level, supporting the rejection of the null

hypothesis. Thus, the study established that the cost of agency banking impacted the financial inclusion of commercial banks in Siaya County.

H_{02}: The time-saving of agency banking has no impact on the financial inclusion of commercial banks in Siaya County.

The study findings revealed a .001 p-value for the time-saving of agency banking and financial inclusion. The p-value was below the .05 significance level, hence supporting the rejection of the null hypothesis. Therefore, the study resolved that the time-saving of agency banking impacted the financial inclusion of commercial banks in Siaya County.

H_{03}: The serving hours of agency banking have no impact on the financial inclusion of commercial banks in Siaya County.

The obtained findings showed a .001 p-value of serving hours of agency banking and financial inclusion. This p-value was below the .05 significance level, supporting the rejection of the null hypothesis. Therefore, the study decided that the serving hours of agency banking impacted the financial inclusion of commercial banks in Siaya County.

H_{04}: The convenience of agency banking has no impact on the financial inclusion of commercial banks in Siaya County.

The study findings showed a .000 p-value for the convenience of agency banking and financial inclusion. This p-value was below the .05 significance level and supported the null hypothesis rejection. Therefore, the study determined that the convenience of agency impacted the financial inclusion of commercial banks in Siaya County.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Introduction

The section presents findings summary, the conclusions, recommendations and suggestions for further research.

5.2 Summary of the Findings

The study collected and analyzed data from 74 respondents to establish the impact of agency banking on the financial inclusion of commercial banks in Siaya County, Kenya. Four objectives guided the study. They included: To analyze the impact of the cost of agency banking on the financial inclusion of commercial banks in Siaya County; To analyze the impact of time-saving of agency banking on the financial inclusion of commercial banks in Siaya County; To assess the impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County; To analyze the impact of the convenience of agency banking on the financial inclusion of commercial banks in Siaya County.

Concerning the first objective, the study sought to analyze the impact of the cost of agency banking on the financial inclusion of commercial banks in Siaya County. The study findings revealed that agency model has led the bank agents to realise savings due to cost-sharing, saving on rent, security cost and on salaries. The findings revealed that the reduction in costs was linked to shared operational costs. Further, the findings show that this model of banking has led to reduced costs for the businesses due to shared costs of running the business. The results show that agency banking has reduced the cost of service.

The multiple regression analysis results found a -0.339 B-value for the cost of agency banking, which signified a negative correlation between the cost of agency banking and the financial inclusion of commercial banks in Siaya County. Besides, the multiple regression analysis results also found .000 p-value of the cost of agency banking and financial inclusion. These findings supported the rejection of the null hypothesis. Therefore, the study demonstrated that the cost of agency banking had a significant negative impact on the financial inclusion of commercial banks in Siaya County, which meant that an increase in the cost of agency banking resulted in a decrease in the financial inclusion of the commercial banks in Siaya County.

Regarding the second objective, the findings demonstrated that reduced time influenced the adoption of agency banking compared to walking into a banking hall to a large extent. The findings also infer that the time it takes averagely to serve an agency banking customer is 0-5 minutes. The findings illustrated that majority of the residents in the area would take over an hour to reach the bank in Siaya County, and thus, agency banking helped them save time. The multiple regression analysis results found a 0.458 B-value for the time-saving of agency banking. This finding suggested a positive correlation between the time-saving of agency banking and the financial inclusion of commercial banks in Siaya County, where a rise in the time-saving of agency banking led to an increase in the financial inclusion of the commercial banks. The results also showed a .001 p-value that was below the .05 significance value. This result supported the null hypothesis rejection. The study established that there was the time-saving of agency banking had a significant positive impact on the financial inclusion of commercial banks in Siaya County.

Regarding the third objective, the outcome showed that the majority of agency banking work operators work for over 10 hours. This finding inferred that agency banking had long operation hours compared to conventional banking. Further, the findings demonstrated that increase in the serving time has influenced the adoption of this model as compared to walking into banking halls to a large extent. The multiple regression analysis results fund a .415 B-value for the serving hours of agency banking. The findings suggested a positive correlation between the serving hours of agency banking and the financial inclusion of commercial banks in Siaya County. An increase in the serving hours of agency banking predicted an increase in the financial inclusion of commercial banks in Siaya County. The p-value of .001 backed the rejection of the null hypothesis. Hence, the study demonstrated a positive significant impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County.

Regarding the fourth objective, in addition to the increased operating hours that influenced the choice of agent banking over banking halls, the findings showed that agency banking offered customers high degrees of convenience. The study established that bank agents brought more people into the store and provided them a broad range of financial services. The average bank agents in Siaya County made 1-50 transactions in a day, thus enabling people access to financial services at their most convenient time. The multiple regression results found a .531 B-value, which meant a positive correlation between the convenience of agency banking and the financial inclusion of commercial banks in Siaya County. The results also found a .000 p-value, which signified a statistically significant relationship between the convenience of agency banking and the financial inclusion of commercial banks in Siaya County. Therefore, the findings demonstrated that the convenience of

agency banking had a statistically significant positive impact on the financial inclusion of commercial banks in Siaya County.

5.3 Conclusions

The study aimed to establish the impact of agency banking on the financial inclusion of commercial banks in Siaya County, Kenya. The study formulated four objectives to help realize this aim. The first objective sought to analyze the impact of the cost of agency banking on the financial inclusion of commercial banks in Siaya County. The study results demonstrated a negative correlation between the cost of agency banking and the financial inclusion of commercial banks in Siaya County, where an increase in the cost of agency banking resulted in a decrease in the banks' financial inclusion. The results also rejected the null hypothesis: the cost of agency banking does not impact the financial inclusion of commercial banks in Siaya County. The study concluded that the cost of agency banking had a statistically negative impact on the financial inclusion of commercial banks in Siaya County.

The second objective sought to analyze the impact of time-saving of agency banking on the financial inclusion of commercial banks in Siaya County. The study results found a positive correlation between time-saving of agency banking and the financial inclusion of commercial banks in Siaya County because were in proximity to agent bankers, eradicating the need to travel for approximately an hour to reach conventional banking facilities. The results also backed the rejection of the null hypothesis: the time-saving of agency banking has no impact on the financial inclusion of commercial banks in Siaya County. The study

concluded that the time-saving of agency banking had a statistically significant positive impact on the financial inclusion of commercial banks in Siaya County.

The third objective sought to assess the impact of serving hours of agency banking on the financial inclusion of commercial banks in Siaya County. The study results found a positive correlation between serving hours of agency banking and the financial inclusion of commercial banks in Siaya County, where agent bankers had longer operating hours compared to conventional banking facilities. The results also supported the rejection of the null hypothesis: the serving hours of agency banking have no impact on the financial inclusion of commercial banks in Siaya County. The study concluded that the serving hours of agency banking had a statistically significant positive impact on the financial inclusion of commercial banks in Siaya County.

The fourth objective sought to analyze the impact of the convenience of agency banking on the financial inclusion of commercial banks in Siaya County. The results indicated a positive correlation between the convenience of agency banking and the financial inclusion of commercial banks in Siaya County. An increase in the degree of convenience of agency banking led to an increase in the financial inclusion of commercial banks in Siaya County. Besides, the results backed the rejection of the null hypothesis: the convenience of agency banking has no impact on the financial inclusion of commercial banks in Siaya County. The study concluded that the convenience of agency banking had a statistically significant positive impact on the financial inclusion of commercial banks in Siaya County. Therefore, generally, the study concluded that agency banking significantly impacted the financial inclusion of commercial banks in Siaya County, Kenya.

5.4 Recommendations of the Study

The study concluded that the cost of agency banking was negatively linked to financial inclusion of commercial banks in Siaya County. These findings inferred that a decrease in operational and customer serving costs could increase the financial inclusion of commercial banks in Siaya County. This study recommends that banks increase awareness of agency banking services and offer them at a lower transaction cost to encourage use and increase the banks' financial inclusion.

Secondly, the study concluded that the serving hours of agency banking had a statistically significant positive impact on the financial inclusion of commercial banks in Siaya County. From this perspective, the study recommends that the agency operators should utilize the maximum serving hours possible which will increase financial inclusion as the operators will serve many customers and increase their income as well. Lastly, the study recommends banks in Siaya County to increase the number of agent bankers to increase outreach to the areas not generally accessible via conventional banking outlets.

5.6 Suggestions for Further Research

The study utilized four agency banking measures, including the cost of agency banking, time-saving of agency banking, serving hours of agency banking, and the convenience of agency banking and one measure of financial inclusion (number of transactions per day). Despite the dependence on a sole measure of financial inclusion, there are various measures that future studies can employ including the penetration of agency services in rural areas and the number of financial services and products available to customers via agency banking. Future studies should attempt to utilize multiple measures of financial inclusion

for better reliability and results' validity. In a bid to further enhance financial inclusion, further studies should focus on the challenges experienced by both the operators and the customers to provide amicable solutions to the challenges.

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APPENDICES

Appendix 1: Questionnaire for Bank Agents

The primary objective of this study is to serve scholarly needs. Please answer the questions as precisely and honestly as possible. (Tick as appropriate)

Part I: Bio Data

1. Name (Optional)

Mr. /Mrs. /Miss/ …….....

2. Gender

a) Male (…….)

b) Female (…….)

3. Agents Name ……

4. Which bank do you represent?

a) KCB (…….)

b) Cooperative bank (…….)

c) Equity bank (…….)

5. Indicate your highest educational level

a) Post Graduate (…….)

b) Undergraduate (…….)

c) College (…....)

d) Others (…....)

6. Length of service as agent of your bank

a) Over three years (…….)

b) Between two to three years (…….)

c) Less than a year (…….)

7. In which category would you classify your role inside the firm?

Business owner (….) Employee (….)

Part II: Independent Variable Based Questions

<u>Cost Effectiveness</u>

8. Please provide an assessment of the cost savings that agency banking has facilitated via the implementation of cost-sharing mechanisms.

	COST SAVING	
	YES	NO
1. Rent		
2. Security		
3. Salaries		
4. others…. (specify)		

9. What is your level of agreement with the following statements? KEY:

SD = Strongly Disagree D = Disagree N = Neutral A = Agree SA = Strongly Agree

	SD	D	N	A	SA
The expenses accrued in the initial operations of the principal firm prior to embarking on agency banking would have imposed constraints on the business's sustained viability and expansion.					
The implementation of agency banking has facilitated cost reduction for my firms as a result of the sharing of operating expenses.					
The cost savings resulting from shared operating expenditures have subsequently led to an increase in my earnings.					

10. Do you believe agency banking has reduced your cost to serve?

Yes [ ]

No [ ]

11. If yes, what is the approximate percentage cut in expenses that your organisation has seen as a result of integrating agency banking into its principal operations?

0-10% (….)
11-20% (….)
21-30% (....)
Above 30% (….)

Time Saved

12. To what extent does time saved influence the use of agency banking compared to visiting the banks?

Large extent (….)

Medium extent (….)

Small extent (….)

13.What is the average time taken to serve an agency banking customer

0-5 minutes

6-10 minutes

11-20 minutes

Over 20 minutes

14. On average, what amount of time would it take to reach the banks in your area

0-10 minutes

11-30 minutes

30-60 minutes

Over 60 minutes

Banking Hours

15. What are your normal working hours?

Less than 6 hours

8-10 hours

Above 10 hours

16. To what extent does long banking hours influence the use of agent banking as compared to visiting the banks?

Large extent (….)

Medium extent (….)

Small extent (….)

Convenience level

17. What motivated you to be a bank agent?

SD = Strongly Disagree D = Disagree N = Neutral A = Agree SA = Strongly Agree

STATEMENT	SA	A	U	D	SD	NA
Transaction Fee income						
Brings more people into my store						
My clients expect me to do it /asked for it						
I want to be associated with a big brand						

Any other reason(s) (specify)

……

……

18. On average, how many transactions do you make in a day?

1-50(….)

50-200(….)

200-500(….)

Above 500(….)

19. To what extent does distance influence the use of agent banking as compared to visiting the banks?

Large extent (….)
Medium extent (….)
Small extent (….)

Financial Inclusion

20. Kindly enter the following information on agent banking. It would be better if you could refer to your closing report from yesterday or the most recent one available.

Fill for the services offered /allowed only:

Transaction Type	**Number of Transactions per day**
Withdrawals	…….
Deposits	…….
Loan repayments	…….
Account opening	…….
Balance inquiry	…….
Account statement	…….
Utility payment	…….
Transfer of funds	…….

Appendix II: Letter of Introduction

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/CTY/PT/29839/2014

DATE: 1st November, 2021

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR DIMBIA ANYANGO AGNES – REG. NO. D53/CTY/PT/29839/2014.

I write to introduce Dimbia Anyango Agnes who is a Postgraduate Student of this University. The student is registered for MBA degree programme in the Department of Accounting and Finance.

Dimbia intends to conduct research for a MBA Project Proposal entitled, "Agency Banking and Financial Inclusion; A Case of Kenya Commercial Banks in Siaya County".

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

Appendix III: Approval of Research Proposal

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 1st November, 2021

TO: Dimbia Anyango Agnes
C/o Accounting and Finance Dept.

REF: D53/CTY/PT/29839/2014

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your revised Research Proposal as per our recommendations raised by the Graduate School Board of 29th September, 2021 entitled "Agency Banking and Financial Inclusion; A Case of Kenya Commercial Banks in Siaya County."

You may now proceed with your Data Collection, Subject to Clearance with the Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School Completed Supervision Tracking and Progress Report Forms per semester. The forms are available at the university's website under Graduate School webpage downloads.

Thank you.

ELIJAH MUTUA
FOR: DEAN, GRADUATE SCHOOL

C.c. . Chairman, Department of Accounting and Finance

Supervisors:

1. Dr. Festus Mithi Wanjohi
C/o Department of Accounting and Finance
Kenyatta University

Appendix IV: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 528419

Date of Issue: 09/April/2022

RESEARCH LICENSE

This is to Certify that Miss. Agnes Anyango Dimbia of Kenyatta University, has been licensed to conduct research in Siaya on the topic: Agency banking and financial inclusion; A case study of Kenya commercial Banks in Siaya County for the period ending : 09/April/2023.

License No: NACOSTI/P/22/16752

528419

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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