

**THE ROLE OF AGENCY BANKING ON DEVELOPMENT OF
THE BANKING SECTOR IN KENYA**

BY

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D61/65282/2013**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI**

OCTOBER 2015

DECLARATION

I declare that this research project is my original work and has not been presented to any other University for academic award to any examination body.

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

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ACKNOWLEDGEMENTS

To begin with, I would like to thank the Almighty God for granting me physical health, finances and grace to finish my coursework and subsequent research project. I wish to thank my supervisor, Dr. Mirie Mwangi, for taking his time to review and offer immeasurable inputs despite his busy schedule. My gratitude goes to all my family members starting with my husband Cecil and daughter Joy for their support during my entire period of study and finally I thank my classmates, and friends for their constant encouragement.

DEDICATION

This research project is dedicated to my late Dad Geoffrey Muigai who loved and valued education and always encouraged us to treasure the same and go beyond the sky.

TABLE OF CONTENTS

| | |
|---|-------------|
| DECLARATION..... | ii |
| ACKNOWLEDGEMENTS | iii |
| DEDICATION..... | iv |
| ABBREVIATIONS | viii |
| ABSTRACT | ix |
| CHAPTER ONE | 1 |
| INTRODUCTION..... | 1 |
| 1.1 Background of the Study | 1 |
| 1.1.1 Agency Banking..... | 2 |
| 1.1.2 Banking Sector Development..... | 4 |
| 1.1.3 Agency Banking and Banking Sector Development..... | 5 |
| 1.1.4 The Banking Sector in Kenya | 7 |
| 1.2 Research Problem | 8 |
| 1.3 Research Objective | 10 |
| 1.4 Value of the study | 10 |
| CHAPTER TWO | 12 |
| LITERATURE REVIEW | 12 |
| 2.1 Introduction..... | 12 |
| 2.2 Theoretical Review | 12 |
| 2.2.1 Agency Theory..... | 12 |
| 2.2.2 Intermediation Theory..... | 13 |
| 2.2.3 Bank led Theory | 14 |
| 2.3 Determinants of Development in the Banking sector | 15 |
| 2.3.1 Efficiency | 16 |
| 2.3.2 Financial Depth | 16 |
| 2.3.3 Access..... | 17 |
| 2.3.4 Stability | 17 |
| 2.4 Empirical Review..... | 18 |
| 2.4.1 International Evidence..... | 18 |
| 2.4.2 Local Evidence | 20 |
| 2.5 Summary of Literature Review..... | 21 |
| CHAPTER THREE | 23 |
| RESEARCH METHODOLOGY | 23 |
| 3.1 Introduction..... | 23 |
| 3.2 Research Design..... | 23 |
| 3.3 Population | 23 |
| 3.4 Sample Design | 24 |
| 3.5 Data Collection | 24 |
| 3.6 Data Validity and Reliability | 24 |
| 3.7 Data Analysis | 25 |
| 3.7.1 Analytical Model..... | 25 |
| 3.7.2 Operationalization of Variables | 26 |

| | |
|---|-----------|
| 3.7.3 Test of significance | 26 |
| CHAPTER FOUR..... | 27 |
| DATA ANALYSIS, PRESENTATION AND INTERPRETATION | 27 |
| 4.1 Introduction..... | 27 |
| 4.2 Descriptive Statistics..... | 27 |
| 4.3 Data validity..... | 29 |
| 4.4 Correlation analysis | 29 |
| 4.5 Regression Analysis and Hypothesis Testing | 31 |
| 4.6 Interpretation of the Findings..... | 34 |
| 4.7 Discussion of Research Findings | 35 |
| SUMMARY, CONCLUSIONS AND RECOMMENDATIONS | 36 |
| 5.1 Introduction..... | 36 |
| 5.2 Summary of Findings..... | 36 |
| 5.3 Conclusion | 37 |
| 5.4 Recommendations..... | 37 |
| 5.5 Limitations of The Study | 38 |
| 5.6 Suggestions for Further Studies | 38 |
| REFERENCES..... | 39 |
| APPENDICES | 44 |
| Appendix I. List of Licensed Commercial Banks operating Agency Banking in Kenya as at 31st December, 2014 | 44 |
| Appendix II: List of Licensed Commercial Banks in Kenya as at 31st December, 2014..... | 45 |
| Appendix III: Raw Data..... | 47 |

LIST OF TABLES

| | |
|--|----|
| Table 4.1: Descriptive Statistics Results..... | 27 |
| Table 4.2: Diagnostic Tests..... | 29 |
| Table 4.3: Correlation Analysis Results | 30 |
| Table 4.4: Regression Coefficients | 31 |
| Table 4.5: Regression Model Summary..... | 32 |
| Table 4.6: The Goodness-of-fit..... | 33 |
| Table 4.7: Analysis of Variance (ANOVA) | 33 |

ABBREVIATIONS

| | |
|-------|--|
| AFI | Alliance for Financial Inclusion |
| AECT | Association for Education Communications and Technology. |
| CBK | Central Bank of Kenya |
| CGAP | Consultative Group to Assist the Poor |
| DFID | Department for International Development |
| EFInA | Enhancing Financial Innovation and Access |
| FSD | Financial Sector Deepening |
| GFDD | World Bank Global Financial Development Database |
| IMF | International Monetary Fund |
| MFI | Micro Finance Institutions |
| MSE | Medium Size Enterprises |
| NBER | National Bureau of Economic Research |
| PBT | Profit before Tax |
| ROA | Return on Assets |
| ROE | Return on Equity |
| SPSS | Statistical Packages for Social Sciences |

ABSTRACT

Banks play a crucial role in the development of a progressive and inclusive financial sector which entails preserving the core foundations of financial stability at all times, ensuring effective and efficient financial intermediation, and contributing towards economic growth and development. Banks hold the vast majority of financial sector assets in developing countries and therefore any development in the banking sector will have a major effect on the financial sector and the economy at large. The agency banking model was aimed at broadening financial inclusion to the majority of Kenyans at low costs which would allow the growth of the financial sector by encouraging the provision of banking services. The objective of the study was to establish the role of Agency banking on the development of the banking sector in Kenya. The study applied descriptive research design. The target population was all the commercial banks that dominate the banking sector in Kenya and the sample was all the commercial banks that have adopted the agency banking model. Secondary data was collected from CBK annual reports, economic reviews, banks annual reports as well as World Bank data base. The study data covered a period of five years between 2010 and 2014. Quantitative analysis was used to analyze the collected data by the help of SPSS. Regression and correlation analysis were conducted to establish the relationship between agency banking and banking sector development. The results revealed that there was a strong positive relationship between Agency banking and the development in the banking sector. A regression analysis revealed that 73.38 % of the independent variables used for the study namely financial depth, operational efficiency, stability and access contributed 73.38 % of the development in the banking sector. The study recommended that all banks be encouraged to adopt the agency model so that the sector can fully utilize its potential.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Despite the impressive performance by banks, customers continue to shoulder the heavy burden of high transactional costs. In an effort to bring down the cost of offering financial services to the Kenyan public, Central bank together with other stake holders put in place a business model (The Agency Banking Model) aimed at broadening financial inclusion to the majority of Kenyans at a lower cost. This would allow the growth of the financial sector by encouraging the provision of banking services to majority of the unbanked Kenyan population and hence support the real sector of the economy (Njuguna, 2010). According to Financial Sector Deepening Kenya (2010), the data indicates that only 19% of adult Kenyans reported having access to a formal, regulated financial institution while over a third (38%) indicated no access to even the most rudimentary form of informal financial service. More than ever before there is a global concern to entrench financial deepening to enable access to previously ignored areas which were considered economically unviable and where majority of the MSEs operate their businesses. Poor people struggle to manage their financial lives given the lack of services suitable to their tiny, highly viable and uncertain income (Collins, 2009).

The objective of the Agency Model is to offer the full range of banking services to customers without having to visit a branch and at the same time trying to decongest banking halls. Access to affordable banking services plays a fundamental role in the development of any economy. Most commercial banks around the globe have found it necessary to incorporate agency banking as one of their strategies of making available formal financial services to majority of unbanked populations. Agency banking has

therefore proved to be a successful model in ensuring that most people who could not access conventional banking services are able to do so through contracted bank agents (AFI, 2012).

In 2010, Central Bank of Kenya (CBK) issued guidelines for agency banking, shepherding banks to start recruiting retailers as agents in developing channels (CBK, 2010). It is against this background that the researcher wants to establish the role of the agent banking to the development of the banking sector in Kenya.

1.1.1 Agency Banking

A commercial bank agent can be defined as a non-bank correspondent or commercial business that provides financial or banking services on behalf of a formal commercial bank. Agents are required to operate a business in a fixed establishment and must meet certain minimum conditions for them to be granted the opportunity to operate (EFInA, 2011). Agents perform on behalf of banks, cash disbursement and cash repayment of loans, cash payment of bills, cash payment of retirement and social benefits, cash payment of salaries, transfer of funds, balance Enquiry, generation and issuance of mini bank statements, collection of documents in relation to account opening, loan application, credit and debit card application, collection of debit and credit cards, cheque book request, cheque book collection by customers and collection of bank mail/correspondence for customers (Dias & McKee, 2010). Agency Banking can significantly reduce set-up and delivery costs, offering a range of financial services to customers who usually feel more comfortable banking at their local merchants than at traditional bank branches (Lozano & Mandrile, 2009).

The popularity of banking agents is evident in most countries around the world. In Mexico alone, more than nine thousand banking agents were established by commercial banks in the year 2010. Other countries such as Brazil, Columbia and Peru have a higher number of

agents than Mexico. In Africa countries such as Kenya who implemented agency banking in 2010 have more than 10,000 banking agents affiliated to various commercial banks in the country. The increase in the use of agents by commercial banks can be attributed to financial sector reforms that have been made by various countries around the globe (EFInA, 2011).

Agency banking was introduced in India in 2006 when banks were allowed to appoint Micro Finance Institutions (MFIs) and post offices as business correspondents for inter alia small deposit-taking. Elsewhere, agency banking refers to the points of service ranging from post offices in the outback of Australia where clients from all banks can conduct their transactions, to rural France where the bank Credit Agricole uses corner stores to provide financial services, to small lottery outlets and clients can receive their social payments and access their bank accounts (Porteous, 2006).

The recent developments in technology have made it possible for agent banking to be possible. For instance the mobile phone technology has significantly contributed to the current development in agent banking. It has made it not only possible for commercial banks to practice financial inclusion but also to provide a forum of convergence for both bank and non banking institutions in order to provide low cost financial services (Jayanty, 2011). Despite the achievements made by other countries in the implementation of the agency banking model, the concept still remains new in most African countries due to lack of appropriate banking reforms that can support the use of agents to provide financial services. The countries that have adopted agency banking in Africa within the last one decade include Kenya, South Africa and Ghana. The South African regulatory framework gives wide discretion to banks to use nonbank third parties to offer banking services beyond their traditional branch network, either as agents or through outsourcing arrangements. The Banks Act allows a bank to contract agents to receive on (the bank's)

behalf from its clients any deposits, money due to it or applications for loans or advances, or to make payments to such clients on its behalf (Bold, 2011).

1.1.2 Banking Sector Development.

Financial Sector development involves improvements in the production information about possible investments, implementation of corporate governance, trading, diversification, management of risk, mobilization and pooling of savings, and exchange of goods and services. Each of these financial functions influences savings and investment decisions and hence economic growth. Since many market frictions exist and since laws, regulations, and policies differ across economies and over time, improvements along any single dimension has an effect on the financial sector and the economy as a whole (Levine, 2004).

The World Bank's Global Financial Development Database (GFDD) developed a relatively simple framework to measure financial development. The framework identifies four sets of variables namely financial depth, access, efficiency and stability. These can be applied to both the financial institutions like banks and the financial markets. To measure financial depth in financial institutions the variables that can be used include the level of private sector credit, the level of financial institutions credit, level of deposits and level of value addition to GDP. Access can be measured in terms of the number of accounts, number of branches and levels of credit. The measures of efficiency include the Net interest margin, lending-deposits spread, overhead costs as a percentage of total assets and profitability (return on assets, return on equity). The measures for the financial institutions stability include capital adequacy ratios, asset quality ratios, and liquidity ratios. The Banking Sector offers financial services to consumers, businesses and other financial institutions. According to Gallego (2002) there are many other different ways in which the Financial Sector can be said to develop, these include, the improvement in the level of

efficiency and competitiveness of the sector, increase in the range of financial services, diversity of institutions which operate in the financial sector, the increase in the amount of money intermediated through the financial sector, increase of capital allocated by private sector financial institutions to private sector enterprises, the improvement in regulation and stability of the financial sector and increased access to financial services (DFID, 2004).

Financial inclusion, which is the ability to access a full range of services from formal financial institutions like banks at affordable prices, means a stride to financial development. Well-developed financial systems channel financial resources to the most productive use and thus foster economic growth alleviates poverty and improves the quality of people's lives. Financial exclusion means that people are at risk of poorly managing their money (FSD, 2010). According to DFID (2004) the mobilization of savings is the most important function of the financial sector, the provision of savings facilities or transaction bank accounts enables households to store their money in a secure place so that it can be put to productive use thus promoting development.

Banks plays a crucial role in the development of a progressive and inclusive financial sector which entails preserving the core foundations of financial stability at all times, ensuring effective and efficient financial intermediation, and contributing towards economic growth and development. Banks hold the vast majority of financial sector assets in developing countries and therefore any development in the banking sector will have a major effect on the financial sector and the economy (Robert & Laune, 2005).

1.1.3 Agency Banking and Banking Sector Development

The Banking sector plays a crucial role in the mobilization and allocation of resources. The constituents of the financial sector are banks, financial institutions, instruments and markets which mobilize the resources from the surplus sectors and channelize the same to

the different needy sectors of the economy. The process of increasing capital accumulation through institutionalization of savings and investment develops the financial sector and fosters economic growth. Agent banking has become widespread around the world with Latin America leading in development. In Brazil, Agent Banking has significantly developed the banking sector and the financial system as a whole (Michael & Bloodgood, 2010).

According to DFID (2004), the most important function of banks is the mobilization of savings by offering savings facilities that enable households to store their money in a secure place and allows this money to be put into productive use thus encouraging capital accumulation and promoting the banking sector. The main objectives of financial sector reform are to allocate the resources efficiency, increasing the return on investment and accelerate growth of the real sectors of the economy. The measures initiated by the government under the reform process are meant to increase the operation efficiency of each of the constituent of the financial sector, thus, agent banking is expected to affect the Banking sector positively.

With the advent of financial liberalization, countries have made deliberate efforts to liberalize their financial sectors by deregulating interest rates, eliminating or reducing credit controls, allowing free entry into the banking sector, giving autonomy to commercial banks, permitting private ownership of banks and liberalizing international capital flows. Financial liberalization brings reforms and policy measures designed to deregulate and transform the financial system and drive it forward with appropriate structures and regulatory framework (Sundararajan & Johnston, 1999).

1.1.4 The Banking Sector in Kenya

The banking sector in Kenya is regulated by the CBK Act, The companies act and other guidelines issued by the Central Bank from time to time. The sector was liberalized in 1995. They have come together under the Kenya Bankers Association which works as lobby for the industry and a forum to address issues affecting the banking sector. According to Kenya Financial Sector Stability Report (2014) the Banking sector in Kenya Consisted of 43 commercial Banks, 1 mortgage finance company, 8 representative offices of foreign banks, 9 microfinance banks, 2 credit reference bureaus, 2 money remittance providers, 87 foreign exchange bureaus.

The sector has over the past few years enjoyed exponential growth in deposits, assets, profitability and products offering, mainly attributed to automation of services and branch network expansion. This growth has brought about increased competition among players and new entrants into the sector, causing banks to focus on diverse customer needs. In an effort to bring down the cost of offering financial services to the Kenyan public, The Central Bank of Kenya together with other stakeholders put in place the Agent Banking Model aimed at broadening financial inclusion to the majority of Kenyans at a lower cost. The Banking Act was therefore amended through the Finance Act 2009, to enable commercial banks to contract third parties to provide some services on their behalf. Agent banking was effected in May 2010 after the publication of prudential guidelines by the Central Bank of Kenya (CBK, 2010).

Kenya's banking sector which is dominated by commercial banks has undergone considerable change. The proportion of the adult population using various forms of formal financial services has risen to 66.7% in 2013 from 41.3% in 2009. This rate of expansion in the financial sector is quite an achievement and places Kenya well ahead of its peers on the continent. There are impressive achievements realized in financial sector deepening

attributed to the government's recent reform efforts and innovations by the financial sector players mainly in commercial banks (Fin Access, 2013).

According to information obtained from the CBK, tremendous growth has been evidenced in agency banking conducted by commercial banks. As at 2012, there were 10 commercial banks that had contracted over 16,000 active agents facilitating over 38 million transactions valued at \$2.3 billion. Kenyan commercial banks have billions at their disposal yet most of it goes to big corporate organizations and high net worth clients while the majority of Kenyans remain excluded, with only 23% of the country's population aged above eighteen years holding bank accounts (FinAccess, 2009).

The bank plans to train the agents and provide them with the necessary technology to handle all banking transactions withdrawals, deposits, loans, account opening and advances, among other things (David, 2012). Kenya commercial Bank trading as "KCB Mtaani" has also seen its agent base grow to a tune of approximately 5,600 by November of the year 2013, The agent banking model continues to gain more popularity with other banks such as Cooperative bank trading as "Co-op Kwa Jirani" has an agency base of over 6,300 while Equity with its trademark "Equity Agent" is leading with approximately 8,400 agents.

1.2 Research Problem

Banks are increasingly using agents to provide financial services to customers. The use of bank agents has the potential to significantly increase financial access by poor and underserved populations to a range of formal financial services, including savings, payments and transfers, and insurance. In particular, agents who may be individuals, small retail shops, post offices, or large retailers can offer customers a convenient and affordable opportunity to cash-in and cash-out of an electronic payments system" (Lauer, Dias & Tarazi, 2011). The agents therefore play a very central role in ensuring that majority of the

unbanked population has access to financial services that conventional banking has been unable to achieve.

The financial sector is the backbone of any economy and it plays a crucial role in the mobilization and allocation of resources. One of the constituents of the financial sector is Banks which mobilize resources from the surplus sectors and channel them to the needy sectors of the economy. The development of agent banking therefore widens scope of the banking sector and according to Michael and Bloodgood (2010), it has significantly developed the financial system in Brazil. Banks help to identify entrepreneurs with good growth prospects and therefore help to reallocate resources to their most productive uses. This important allocation function will help in the development process of an economy (Schumpeter, 1912)

There is evidence of numerous studies on agency banking around the globe. For instance Lozano and Mandrile (2010) studied agent model for branchless banking in Colombia and developed a model whereby MFIs act as agents of branchless banking services, creating a new microfinance value chain through a process of scale and inclusion, and enable the poor to access a wider array of banking services. Ivatury and Mas (2008) studied experience with branchless banking and found that branchless banking lowers the cost of delivery, including costs both to banks of building and maintaining a delivery channel and to customers of accessing services. Kumar, Nair, Parsons and Urdapilleta (2006) conducted a study on correspondence banking and found that branchless banking allows banks to gain proximity to small and perhaps higher risk clients through a format that is friendly to this population segment.

In Kenya, Mwangi (2012) conducted a study on agent banking as a diversification strategy by commercial banks in Kenya. The study established that agency banking was successful since commercial banks have managed to achieve more geographical coverage

through this model. Nyaboga et al. (2012) carried out a study on the impact of agent banking on entrepreneurs in Kisii Township. It was concluded that agent banking has a high impact on entrepreneurs in the town. Another study was also carried out by Mwenda (2013) challenges facing agent banking implementation in Kenya. The findings indicate that most banks did not have the technological competency to implement the model.

There are four main factors that affect development of the banking sector namely, financial depth, Access to financial services, profitability and liquidity ratio requirements. Despite the level of research activity that has been noted on agency banking both locally and globally, the question remains about the real effect of Agency banking on the development of the Banking sector in Kenya. This research study will look at the four variables together in order to address this research gap.

1.3 Research Objective

To establish the role of agency banking on the development of the Banking sector in Kenya.

1.4 Value of the study

Various parties will benefit from this study upon its completion. Those in the academic field will find additional material on agency banking. The concept is still new in Kenya and the dynamism of the financial sector through agent banking may see most academicians interested in conducting more research on the agency banking model thus need for additional literature to shed more light.

The banks will get more information on Agent Banking and make decisions and policies that support the model and hence the financial sector as a whole. Banks wishing to venture into agency banking model will also have the relevant information to help them make appropriate decisions to drive the sector forward.

Policy makers in the economy will also be able to get more information on the affect the concept in the financial sector which is the backbone of any economy. This will help them develop policies that can drive the economy forward through agency banking

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the relevant literature that has been reviewed in the area of agency banking and the financial sector. The issues discussed include the theoretical and empirical studies.

2.2 Theoretical Review

There are a number of theories that explain the performance of agencies that are contracted by commercial banks. The theories discussed in this section include the Agency Theory, Intermediation Theory, and the Bank led Theory.

2.2.1 Agency Theory

Agency Theory is concerned with the Agency relationship in which one party (the principal delegates work to another (the agent) who performs that work. Agency theory attempts to describe this relationship using the metaphor of a contract. Agency Theory is concerned with resolving two problems that can occur in the Agency relationship, the first is the Agency problem that arise when the desires and goals of the principle and the agent conflict and secondly it is difficult and expensive to verify what the Agent is actually doing. The other problem is that of risk sharing that arises when the principle and the Agent have different attitudes and preferences towards risk thus making them to have different actions. The Agency structure is applicable to a variety of settings and most frequently has been applied to organizational phenomena (Kathleen, 1989). The first proposition in Agency theory is that when the contract between the principal and the agent is outcome based, the agent is more likely to behave in the interest of the principle (Jensen & Meckling, 1976). The second proposition is that when the principle has information to

verify agent behavior, the agent is more likely to behave in the interests of the principle (Fama, 1980). According to Harris and Raviv (1978) Principle –Agent researchers are concerned with a general theory of principal – agent relationship that can be employer-employee, lawyer-client, buyer- supplier and other similar Agency relationships.

Traditional agency theory makes little mention of what obligations, moral or otherwise, principals have to their agents. The emphasis lies almost exclusively on what agents should or must do for the principals, relying, in turn, on a vague assumption that principals will compensate agents adequately for their services. Some ethics scholars argue that principals have obligations as well and it some would be unethical to harm employees to obtain improvements in shareowners' wealth, because the shareholders also have moral obligations directly to the employees as an extension of the ethical employer/employee relationship. This ethical problem is only complicated by the reality that, principals are often institutions rather than individuals. Meanwhile, consistent with the conventional formulation of the theory, agents are seen as having ethical duties to the principals. If managers act in self-interest, and it fails to serve the best interests of the shareholders, they may, according to some views, have fallen short on their ethical responsibilities (Bowie & Edward, 1992).

2.2.2 Intermediation Theory

Intermediation theory is based on the theory of informational asymmetry and the agency theory. Its goal is to explain why financial intermediaries exist. According to the theory, the savings and investment process in capitalist economies is organized around financial intermediation and financial intermediaries which serve to reduce transaction costs and informational asymmetries thus making them central institutions of financial and economic growth (Greenbaum & Thakor, 2007).

Financial intermediaries and financial markets are two important institutions, which contribute to the optimal allocation of resources in an economy. Cuza (2009) states that under the agency banking arrangements, the intermediation theory provides a framework that can be utilized to explain the functions that the agencies perform in relation to the financial institutions.

The existence of financial intermediaries is as a result of high transaction costs, lack of complete information in useful time; and the method of regulation. Many of the imperfections generated by informational asymmetry lead to the emergence of financial intermediaries to eliminate or reduce these costs. The intermediation theory outlines the various functions of bank agencies, that is the reduction of transaction costs which is concerned with accessibility of financial institutions / markets for households, individuals and firms, the reduction of liquidity risk and the provision of information. Thus the theory implies that the level of performance of the agencies to large extent is determined by the nature of financial intermediaries' functions the agents execute (Scholtens & Wensveenn 2003).

2.2.3 Bank led Theory

According to Rotman (2010) the bank led theory proposes a model that promises the potential to increase substantially the financial services outreach by using a different delivery channel, a different trade partner with experience and target market distinct from traditional banks, and may be significantly cheaper than the bank based alternatives. Under the bank led model arrangements, the technological/physical infrastructure of a retailer is used to provide some basic banking services like balance enquiry, account-to-account fund transfer, payments for goods/services at merchant outlets using bank account. However, a number of the services provided by contracted agents are also provided by banks and are covered under existing regulations; hence, the model poses no

specific regulatory issues. Besides, it lowers the cost of delivery to banks, including costs of building and maintaining a delivery channel and to customers of accessing services (Tufano, 2008).

Lyman, Ivatury and Staschen (2006), assert that in the most basic version of the bank-led theory of branchless banking, a licensed financial institution delivers financial services through a retail agent. That is, the bank develops financial products and services, but distributes them through retail agents who handle all or most customer interaction; this provides a distinct alternative to conventional branch-based banking in that customers conduct financial transactions at a whole range of retail agents instead of at bank branches or through bank employees.

The bank is the ultimate provider of financial services and is the institution in which customers maintain accounts. The bank contracted agencies have face-to-face interaction with customers and perform cash-in/cash-out functions, much as a branch-based teller would take deposits and process withdrawals. Bank led theory provides a distinct alternative to conventional branch-based banking in that customer conduct financial transactions at a whole range of retail agents instead of at bank branches or through bank employees (Lyman et al. 2006)

2.3 Determinants of Development in the Banking sector

George and Havhannes (2009) observed that there are many institutional factors that affect financial development. They affect financial depth, and access to financial services, asset quality and profitability. Financial systems in high-income countries tend to have more depth, provide more access, and are more efficient than those in lower-income countries. However, they score about the same in terms of stability. It is important to analyze all the aspects together because focusing on one would mean missing important aspects that play a major role in the financial systems (Cihak & Levin, 2013).

2.3.1 Efficiency

Efficiency of financial intermediaries in intermediating resources and facilitating financial transactions is key in reducing costs and hence improving profitability. Apart from increasing access to those excluded from financial services and reducing reliance on informal financial sources such as Accumulating Savings and Credit Associations (ASCAs), Rotating Savings and Credit Associations (ROSCAs) and shylocks, agency banking has reduced the need for more staff and branches to reach customers (Arora & Ferrand, 2007).

Agency banking has reduced cost, improved profitability and hence enhanced efficiency in the financial sector. It has also increased the ease of banks' expansion hence outreach to far flung market pockets of bankable populations (Bold, 2011). The model has not only become a means of offering convenience to bank customers but also a channel for lenders to mobilize cheap deposits with little operating costs thus improving profitability. According to CBK report (2014) agency banking model allows banks to reach more customers without opening new branches that are expensive to set up and deploy staff, this reduces overall costs and therefore improves efficiency and profitability.

2.3.2 Financial Depth

Financial depth is the amount of money or asset equivalent to which a company or organization has access. Banks use the deposit liabilities to buy assets and at the same time lends it out and earns income. By using the deposit liabilities, the bank is able to leverage their capital and earn more. According to Cihak and Levine (2013) the financial depth could be measured by the volume of deposits, the value of private sector credit, or the financial institutions assets. The greater the values the higher the Gross value added to the financial sector.

2.3.3 Access

This is the degree to which individuals can and do use financial services. Arora and Ferrand (2007) reveal that technology adoption especially, in banking systems has shown a great momentum and spread at an unbelievable pace across the world. Considering the importance of banking system high presence and affordability, there is great potential of using this in agency banking for provision of banking services to unbanked community. However, banking agents do not change their system as frequent often leading to system failure and the consequent delays in transaction execution (Lyman et al, 2006). This leads to customer inconvenience and trust over the security of transaction lodged with agent banks. Moreover, these constant systems failure makes transactions with banking agents vulnerable to fraud.

A recent survey by Financial Sector Deepening (FSD) Kenya showed that the agents had significantly increased access to banking services with 52 per cent of the country's population being within three kilometers of an agent, compared with only 22 per cent within three kilometers of a branch. According to CBK report (2014) 35,789 agents contracted by commercial banks conducted 58.2 million transactions in 2014 as compared to 42 million in 2013.

2.3.4 Stability

The financial stability of a company can be tested in many ways. One of the quickest ways to see just how well a company is performing is to use liquidity ratios. The term liquidity is defined as the ability of a company to meet its financial obligations as they fall due. The liquidity ratio, then, is a computation that is used to measure a company's ability to pay its short-term debts. The current ratio is the most liberal and widely used measure and it indicates a company's ability to pay its current liabilities from its current assets. This ratio is one used to quickly measure the liquidity of a company. The formula for the current

ratio is: $\text{Current Ratio} = \text{Current Assets} \div \text{Current Liabilities}$. Agents are the touch points where subscribers of services can get money into and out of the system. In instances where a subscriber arrives at an agent with the need to withdraw a large amount of money and the agents do not have enough cash to satisfy the request, it leads to frustration (Musau, 2013).

2.4 Empirical Review

Policy makers around the world seek to encourage the provision of financial services to the unbanked and under-banked poor, they implement regulatory frameworks that enable the spread of low-cost branchless banking while at the same time protect consumers against fraud. This is a difficult balance to strike, particularly when it comes to regulating agents, which typically play a crucial role in receiving and dispensing cash on behalf of the financial service provider (CGAP, 2010). World Bank report (2010) indicates that branchless banking is only allowed to be undertaken by licensed deposit-taking financial institutions (bank and non-bank) or their agents. Furthermore, all customers of financial institutions (FIs) undertaking branchless banking activities must be uniquely identified.

2.4.1 International Evidence

Schmid and Walter (2009) carried out a study to establish the agency costs in the banking industry. The study examined one hundred and four largest banks in the United States of America. By analyzing the effect of four variables that proxy for agency costs—earnings volatility, managers' portfolio diversification losses, bank size, and standard deviation of bank equity returns on the three financial policy variables of managerial stock ownership, leverage, and dividend yield. From the study findings indicate that the operational costs incurred in diversifying the agency portfolios in order to confirm or reflect the requirements as set by the bank to large extent affect the performance of the contracted banking agency.

A study Conducted by Bold (2011) in Brazil found that some countries restrict the location of agents, though such restrictions are sometimes eased when regulators recognize that the regulations create obstacles to financial inclusion. For example, due to concerns that agents could threaten bank branches, Bold also found that Indian regulators initially required agents to be located within 15 kilometers of a “base branch” of the appointing bank in rural areas, and within 5 kilometers in urban areas. This policy intended to ensure adequate bank supervision of its agents, limited the use of agents by banks with only a few branches .According to the study overly restrictive location requirements can complicate the business case for viable agent-based banking and ultimately work against financial inclusion goals. In addition, the real-time nature of most agent services has enabled remote supervision, thereby obviating one of the central arguments for location restrictions.

In the study on innovations and challenges in banking industries in India, Jayakumar and Anbalagan (2012) found out that a number of banking agents lack the capacity to handle large transactions of cash and under spend on security measures. This affects the performance of the banking agents since it negatives both existing as well as potential client’s confidence in conducting businesses with them. Moreover, the authors indicate that the performance of the banking agents has also been affected due to the higher level of competition in the industry.

Mas (2008) carried out a study to ascertain the challenges of realizing the potentials of branchless banking and found that costs constitute a larger part of factors affecting the performance of agency banking. From the findings study, it is apparent as stated by the author that although agency banking is beneficial to both commercial banks and customers as it has the potential to extend financial services to unbanked and marginalized communities, it also has challenges and risks. As argued by Mas, the staff and location expenses hit large agents hardest. Higher transaction volumes eventually require personnel

and space dedicated to handling the agency banking business. But this creates a rigid cost “floor” that leaves the agent with much less flexibility on how many transactions are needed for the agent business to be attractive.

2.4.2 Local Evidence

Barasa (2013) did a study to determine the role of Agency Banking in enhancing financial sector deepening in Kenya. The study sort to analyze the benefits of agency banking to customers and banks and the ability of agents to enhance banking services to the unbanked. The study was conducted among 40 registered outlets with a respondent sample of 400 people. Systematic sampling technique was used to pick the respondents who were requested to fill structured questionnaires. Descriptive data analysis tools were used and the likert scale to determine the weight of the factors. The study concluded that agency banking has played a vital role in enhancing the penetration of banking services in unbanked markets and in addition enhances the access of full range of banking products within an informal setting.

Another study was carried out by Mbugua (2015) on the role of Agency Banking Services in promotion of financial inclusion in Nyeri Town, Kenya. The study used a sample of four selected banks in the region that had extensive agency networks. Data was collected by use of questionnaires which were administered to bank branch managers and the appointed agents. Data was analyzed using descriptive and inferential statistics. The findings of the study indicated that customers were willing to forego the extra charge to procure banking services through banking agent outlets. Regression analyses indicated that four factors (availability of liquidity, geographical coverage, cost, security) have a significant positive relationship to financial inclusion.

In a study conducted by Atandi (2013) on the challenges of Agency banking in Kenya, the researcher targeted Picot region and the target population consisted of all 40 equity bank

agents in the region. A census was conducted of all the agents which were used as the sale. Purposive sampling was used to select all the forty agents. This was preferred because all the respondents required for the study had unique characteristics. The data collection methods employed on the study were questionnaires and secondary data obtained through search from the CBK. Descriptive method was used in analyzing qualitative data while statistical package for social sciences was used to run descriptive analysis. The research findings indicated that Pokot County needed agency banking but had faced various hindering challenges like lack of adequate mobile network services, liquidity related problems and lack of major bank Branch.

Dianga (2014) in a study on the effect of Agency Banking on the performance of commercial Banks in Kenya concluded that there was a positive correlation between Agency Banking and the financial performance of commercial banks. The study was conducted on commercial banks that have adopted agency banking. Secondary data was extracted from the CBK annual and supervisory reports as well as annual reports of commercial banks. Quantitative analysis was employed to analyze the data and findings revealed that there was a positive relationship between agency banking and the financial performance of commercial banks as measured by ROE and ROA.

2.5 Summary of Literature Review

Empirical studies noted above indicate that agency banking has an effect on the financial sector and notably in banking where it has improved financial accessibility and inclusion especially for the lower income group who could previously not access formal banking services. Studies have also indicated an increase of financial transactions occasioned by agency banking; however previous studies have only looked at individual parameters independently and therefore failed to bring out the real effect of Agency Banking on the development of the banking sector. According to Cihak and Levine (2013) it is important

to analyze all aspects together because focusing on one means missing out on important aspects that play a major role in the financial systems. This research seeks to look at the four variables namely financial depth, access, efficiency and stability, all combined to fill this gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the research methodology that was adopted by the researcher. Among the things discussed include the research design that was employed; the target population; the sample size and sampling techniques to be used; data collection and the instruments used as well as the data analysis and presentation techniques.

3.2 Research Design

The study used descriptive research design. Descriptive research involve collections of quantitative information that can be tabulated along a continuum in numerical form, it involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). Descriptive studies are aimed at finding out "what is," so observational and survey methods are frequently used to collect descriptive data (Borg & Gall, 1989). Descriptive studies report summary data such as measures of central tendency including the mean, median, and mode, deviance from the mean, variation, percentage, and correlation between variables. Descriptive research can include multiple variables for analysis and might employ methods of analyzing correlations between multiple variables by using tests such as Pearson's Product Moment correlation, regression, or multiple regression analysis (AECT, 2001)

3.3 Population

As at 31st December 2014, the banking sector comprised of 43 commercial banks, 1 mortgage finance company, 8 representative offices of foreign banks, 9 microfinance banks, 2 credit reference bureaus and 13 money remittance providers. The target

population for this research study was the Commercial Banks in Kenya which dominate the banking sector and which are directly affected by Agency Banking.

3.4 Sample Design

The purposive sampling method was used to select the sample. The Purposive sampling method is a non-probability sampling method where the selection of sample reflects certain characteristics and the researcher uses personal judgment to select subjects that are relevant to the study. The target population for this research study was the Commercial Banks in Kenya which dominate the banking sector and the sample was the Commercial banks that have adopted Agency Banking.

3.5 Data Collection

The researcher used secondary data which was sourced from CBK annual reports and monthly economic reviews, data was also collected from the individual bank's annual financial reports and other relevant reports that indicated the level of activity in terms of volume of transaction and the value transacted through agency banking. The research covered a period of four years between the year 2010-2014. This period was considered appropriate considering that Agency banking in Kenya was effected in 2009.

3.6 Data Validity and Reliability

The reliability of the measuring instrument focused on ensuring that the research was free from random error hence provide consistent results. The regression model was subjected to a number of diagnostic tests to evaluate the validity of the model. The diagnostic tests included: Breusch-Pagan test, White Heteroskedasticity Test (LM) for constant variance of residual over time, the ARCH (Autoregressive conditional heteroscedasticity) test which detects the problem of heteroscedasticity and Ramsey RESET test for the specification of the regression.

3.7 Data Analysis

Quantitative analysis was used to analyze the collected data. Data analysis software Statistical Packages for Social Sciences (SPSS) aided in data analysis. Descriptive statistics was used and regression analysis was conducted to show the relationship between agency banking and the banking sector development indicators such as Operational efficiency, Access, Financial depth and Stability.

3.7.1 Analytical Model

The following regression equation was used to illustrate the relationship:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + e$$

Where,

Y = Banking Sector Development. This is the dependent variable and can be measured By the ratio of money and quasi money or money supply (M2) as a percentage of GDP. M2 comprise the sum of currency outside banks, demand deposits other than Those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government.

a = Y intercept, represents the beta of commercial Banks.

b₁ to b₄ = regression co-efficient or change introduced in Y by each independent variable

x₁ = Operational efficiency of banks offering agency banking

x₂ = Financial Depth of commercial banks that have adopted agency banking

x₃ = Access to financial services through banks offering agency banking

x₄ = Stability of commercial banks that have adopted agency banking

e = error term within a confidence level of 95%

3.7.2 Operationalization of Variables

| Variable | Definition | Formula |
|----------|----------------------------|------------------------------------|
| Y | Banking Sector Development | Log of M2/GDP |
| X1 | Operational Efficiency | Log of ROA=PBT/Total Assets |
| X2 | Financial Depth | Log of Total Customer Deposits |
| X3 | Access | Log of Loans and Advances Accessed |
| X4 | Stability | Log of Liquidity |

3.7.3 Test of significance

The model significance was tested using the Analysis of Variance (ANOVA) and Coefficient of determination (R²) and was used to measure how well the regression line approximates the real data at 95 % significance level. Correlation Coefficient (R) which is a measure of the strength and direction of the linear relationship between two variables was also used to measure the strength of the relationship between the dependent variable (Y) and the independent variables (X1 to X4). The study used statistical Package for social science (SPSS) to analyze the data.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The current chapter presents the outcome of data analysis and findings in line with the objectives of the Study. The data were analyzed using the Statistical Program for Social Sciences (SPSS) version 22, by use of both descriptive and inferential statistics. Descriptive statistics such as mean, median, maximum, minimum, standard deviation, Skewness and Kurtosis were used. The regression model was preceded by diagnostic tests.

4.2 Descriptive Statistics

Table 4.1 gives the summary statistics of the main variables that have been included in the model including: minimum, maximum, mean, standard deviation, skewness, kurtosis and Jarque-Bera test for normality.

Table 4.1: Descriptive Statistics Results

| | Banking sector development | Operational efficiency | Financial depth | Access | Stability |
|-----------|---|-----------------------------------|----------------------------|---------------|------------------|
| Mean | .46 | 0.11 | 1.53 | 8.00 | 0.4994 |
| Median | .34 | 0.12 | 1.22 | 9.00 | 0.913 |
| Maximum | .86 | 0.38 | 7.35 | 12.00 | 0.312 |
| Minimum | .24 | -0.47 | 0.43 | 7.00 | 0.191 |
| Std. Dev. | .02 | 0.12 | 1.07 | 2.62 | 0.331 |

| | | | | | |
|--------------|-------|-------|-------|-------|--------|
| Skewness | .348 | 0.453 | 0.651 | 0.045 | 0.829 |
| Kurtosis | 2.386 | 2.045 | 3.004 | 2.034 | 3.223 |
| Jarque-Bera | 7.958 | 6.754 | 5.523 | 4.582 | 13.311 |
| Observations | 65 | 65 | 65 | 65 | 65 |

Table 4.1 above reports summary statistics for the sample. The results indicated that the dependent variable bank sector development had a mean of .46 and a standard deviation of 0.02 which indicated uniformity in the data. The results showed that access which was measured as a log of transaction volume had a mean of 8.00 with a minimum of 7.00, a maximum of 12.00, skewness 0.045 and kurtosis of +2.034. Comparatively, Stability had a mean of .4994, minimum of .312, maximum of .191, skewness of 0.829 and kurtosis of +3.223. Operational efficiency had a mean of .11, minimum of -0.47, maximum of 0.38, skewness of 0.453 and kurtosis of 2.045. Financial depth had a mean of 1.53, minimum of 0.43, maximum of 7.35, skewness of 0.651 and kurtosis of 3.004.

Analysis of skewness shows that all the variables are asymmetrical to the right around its mean. Additionally, 'financial depth and stability' are highly peaked compared to other regressors. Jarque-Bera is a test statistic for testing whether the series is normally distributed. It measures the difference of the skewness and kurtosis of the series with those from the normal distribution using the null hypothesis of a normal distribution. A small probability value leads to the rejection of the null hypothesis of a normal distribution. Jarque-Bera test for normality shows that all variables are normally distributed.

4.3 Data validity

The preferred regression model was subjected to a number of diagnostic tests to evaluate the validity of the model. The diagnostic tests included: Breusch-Pagan test, White Heteroskedasticity Test (LM) for constant variance of residual over time, the ARCH (Autoregressive conditional heteroscedasticity) test which detects the problem of heteroscedasticity and Ramsey RESET test for the specification of the regression. The results were presented in Table 4.2 below.

Table 4.2: Diagnostic Tests

| Test | F-statistics | Probability |
|--|--------------|-------------|
| Ramsey RESET Test: | 1.76 | 0.16 |
| White Heteroskedasticity Test: | 2.12 | 0.079 |
| ARCH Test: | 1.18 | 0.32 |
| Breusch-Pagan Test for Heteroskedasticity LM Test: | 1.12 | 0.57 |

Table 4.2 shows that the parameters of the regression analysis were stable and the model can be used for estimation at 5 percent confidence level. All the probability values were less than F-statistics coefficients at 5 percent level of significance and therefore the null hypothesis was not rejected. The diagnostic test outcomes were therefore satisfactory.

4.4 Correlation analysis

Correlation analysis was used to measure the degree of association between different variables under consideration. In this section, the study measured the degree of association between the independent variables taken for the study that is, Operational efficiency, Financial depth, Access and Stability and the dependent variable, Banking

Sector Development. Table 4.3 and 4.4 presents the correlation coefficients for all the variables considered in this study.

Table 4.3: Correlation Analysis Results

| | Bank sector development | Operational efficiency | Financial Depth | Access | Stability |
|----------------------------|-------------------------|------------------------|-----------------|----------|-----------|
| Banking sector development | 1 | | | | |
| Operational efficiency | .536(**) | 1 | | | |
| Financial depth | .828(**) | .533(**) | 1 | | |
| Access | .654(**) | .541(**) | .412(**) | 1 | |
| Stability | .504(**) | .502(**) | .591(**) | .346(**) | 1 |

** Correlation is significant at the 0.05 significance level

Source: researcher 2015

From the correlation result for the study model in table 4.3, Operational efficiency has a strong positive correlation with the bank sector development (.536), the study further indicated that financial depth has also a strong and positive relationship with bank sector development (.828). The study also indicated that bank sector development also has a strong significant relationship with access (.654) and stability (.504). Further the results indicate that operational efficiency has a moderate and significant relationship with Access (.541). The study indicated that each of the indicated independent variables had a significant, positive correlation with the dependent variable; bank sector development but no autocorrelation was established between the variables.

4.5 Regression Analysis and Hypothesis Testing

Regression analysis was used to determine the role of agency banking on development of the banking sector in Kenya.

Table 4.4: Regression Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|---------------------------|--------------------------------|---------------|------------------------------|-------|------|
| | B | Std. Error | Beta | T | Sig. |
| (Constant) | 7.13 | 0.443 | | 4.335 | .001 |
| Operational efficiency | 0.444 | 0.254 | 0.021 | 3.993 | .001 |
| Financial depth | 0.738 | 0.262 | 0.022 | 3.446 | .002 |
| Access | 0.612 | 0.372 | 0.038 | 4.937 | .001 |
| Stability | 0.223 | 0.242 | 0.032 | 1.931 | .001 |

Source: Research Findings

The regression model,

$$BSD = \alpha + \beta_1 (X1) + \beta_2(X2) + \beta_3(X3) + \beta_4(X4) + \varepsilon_i$$

$$\text{Becomes } BSD = 7.13 + 0.444X1 + 0.738 X2 + 0.612 X3 + 0.223 X4 + \varepsilon$$

According to the regression equation established, taking all factors into account (operational efficiency, financial depth, Access and stability), Banking Sector Development is 7.13. The Standardized Beta Coefficients give a measure of the

contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. At 5% level of significance and 95% level of confidence, operational efficiency had a 0.001 level of significance, financial depth had a 0.002 level of significance, access had a 0.001 level of significance and stability had a 0.001 level of significance.

Table 4.5: Regression Model Summary

| Model Summary | | | | |
|----------------------|--------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | 0.8566 | 0.7338 | 0.7011 | 0.252 |

Source: Research Findings

From the results shown in Table 4.5, the model shows coefficient of determination (R^2) with a value of 0.7338. This implies that the independent variables; operational efficiency, financial depth, Access and stability explain 73.38 percent of the variations of the banking sector development.

Table 4.6: The Goodness-of-fit

| | | R | R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---------|-------|----------|----------------------------|-----------------------|----------|------|------|---------------|
| | | | | | R ² Change | F Change | Df 1 | Df 2 | Sig. F Change |
| 1 | .653(a) | 0.856 | 0.7338 | .0358 | .730 | 19.241 | 3 | 2 | .0159 |

Predictors: Operational efficiency, Financial depth, Access and stability

The results in Table 4.6 show that if all the variables are taken together, explain 73% of the variation in the banking sector development ($R^2 = .7330$).

Table 4.7: Analysis of Variance (ANOVA)

| | Sum of Squares | df | Mean Square | F | F-statistics | Significance |
|------------|----------------|----|-------------|-------|--------------|--------------|
| Regression | 52.55 | 2 | 14.93 | 18.33 | 88.33 | 0.0159 |
| Residual | 3.34 | 63 | 4.22 | | | |
| Total | 55.89 | 65 | | | | |

NB: F-critical Value 88.33 (statistically significant if the F-value is less than 88.33: from table of F-values).

Predictors: (Constant), operational efficiency, financial depth, Access and stability

The value of the F statistic, 88.33 indicates that the overall regression model is significant, which means that there is a significant relationship between the predictor operational

efficiency, financial depth, access and stability (taken together) and banking sector development. This is clearly demonstrated by the statistically significant level of 0.0159 which is less than 0.05.

4.6 Interpretation of the Findings

The results from the correlation analysis indicated that there was a strong positive relationship between the dependent variable, Banking Sector Development and the independent variables. Operational efficiency has a strong positive correlation (.536), financial depth had a strong and positive relationship (.828). The study also indicated that bank sector development also has a strong significant relationship with access (.654) and stability (.504). According to the regression equation established, taking all factors into account (operational efficiency, financial depth, Access and stability), Banking Sector Development is 7.13.

The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. At 5% level of significance and 95% level of confidence, operational efficiency had a 0.001 level of significance, financial depth had a 0.002 level of significance, access had a 0.001 level of significance and stability had a 0.001 level of significance.

The results from the regression model shows coefficient of determination (R^2) with a value of 0.7338. This implies that the independent variables; operational efficiency, financial depth, Access and stability explain 73.38 percent of the variations of the banking sector development. The study therefore identifies operational efficiency, financial depth, Access

and stability as critical factors that play a role (73.38 %) in the development in the banking sector.

4.7 Discussion of Research Findings

According to Fama (1980) on the Agency Theory, he proposed that when the principle has information to verify agent behavior then the agent is more likely to behave in the interests of the principle. The study on the role of agent banking on development of the Banking Sector agrees with this theory because the agency relationship brings about a positive impact and hence acts in the interests of the principle.

The study also supports the intermediation theory. This is expected because according Greenbaum and Thakor (2007) on the theory, the savings and investment process in capitalist economies is organized around financial intermediation and financial intermediaries which makes them central in financial and economic growth. The result of the study has therefore demonstrated that Agency banking has facilitated financial intermediation and has a positive correlation with the development of the banking sector. According to Rotman (2010) the bank led theory proposes a model that promises the potential to increase substantially the financial services outreach by using a different delivery channels. The study has revealed that Agency banking has increased access to financial services as expected and lead to overall development of the banking sector.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is a synthesis of the entire study, and contains summary of research findings, exposition of the findings, commensurate with the objectives, conclusions and recommendations based thereon.

5.2 Summary of Findings

The study did a summary statistics for the sample; The results showed that access which was measured as a log of transaction volume had a mean of 8.00 with a minimum of 7.00, a maximum of 12.00, skewness 0.045 and kurtosis of +2.034. Comparatively, Stability had a mean of .4994, minimum of .312, maximum of .191, skewness of 0.829 and kurtosis of +3.223. Operational efficiency had a mean of .11, minimum of -0.47, maximum of 0.38, skewness of 0.453 and kurtosis of 2.045. Financial depth had a mean of 1.53, minimum of 0.43, maximum of 7.35, skewness of 0.651 and kurtosis of 3.004.

Correlation analysis was used to measure the degree of association between different variables under consideration. From the correlation result for the study model in table 4.3, Operational efficiency has a strong positive correlation with the bank sector development (.536, $p=.002$), the study further indicated that financial depth has also a strong and positive relationship with bank sector development (.828, $p=0.002$). The study also indicated that bank sector development also has a strong significant relationship with access (.541, $p=0.001$) and stability (.504, $p=0.001$). Further the results indicates that operational efficiency has a moderate and significant relationship with Access (.453, $p=0.21$). The study indicated that each of the indicated independent variables had a

significant, positive correlation with the dependent variable but no autocorrelation was established between the variables.

The regression model showed a goodness of fit measure indicated by the coefficient of determination (R^2) with a value of 0.7338. This implied that the independent variables; operational efficiency, financial depth, Access and stability explain 73.38 percent of the variations of the banking sector development.

5.3 Conclusion

The study concludes that Agency banking plays a significant role in the development of the banking sector. The variables operational efficiency, stability, access and financial depth account for 73.38% of the banking sector development. In light of the above findings it is therefore evident that Agency banking will lead to the development of the banking sector. Agency banking will improve accessibility to financial services, this will expand and develop the banking sector. Agency banking will also increase the return on assets of the banks as the existing infrastructure will be utilised more efficiently thus improving on the overall operational efficiency and thus help in the development of the sector. Through Agency banking more liquid assets will be available to cater for withdrawals and at the same time deposit liabilities will increase thus improving the stability and financial depth of the banking sector.

5.4 Recommendations

The study established that agency banking play a significant role in the development of the banking sector by improving efficienct , increasing access , improving /statbility and operational efficiency. The study therefore reccomends that agency banking is a channel and strategy through which the banking sector can develop. All commercial banks should

therefore be encouraged to adopt the model since it will lead to the development of the entire sector.

5.5 Limitations of The Study

The study was limited to the number of years the model has been in operation and since there has been an exponential growth since inception, longer historical data would give better results that will avoid bias since there will be a state of stability in the trends. More historical data would give more conclusive results.

Some of the Banks had a problem availing all the information relating to agents as they deemed them confidential and for internal use especially those relating to returns and levels of activity directly from agents.

5.6 Suggestions for Further Studies

This study was conducted on role of agency banking on development of the banking sector in Kenya. This study recommends that studies be done to establish the role other factors play in the development of the banking sector. Other new innovations in the banking sector could be examined as innovations are intended to bring about development in any sector of our economy.

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APPENDICES

Appendix I. List of Licensed Commercial Banks operating Agency Banking in Kenya as at 31st December, 2014

- 1) Chase Bank (K) Ltd.
- 2) Citi Bank Ltd
- 3) Consolidated Bank
- 4) Cooperative Bank of Kenya Ltd
- 5) Diamond Trust Bank Kenya Ltd
- 6) Equity Bank Ltd.
- 7) Family Bank Ltd.
- 8) Kenya Commercial Bank Ltd.
- 9) NIC Bank Ltd
- 10) K-Rep Bank Ltd
- 11) Ecobank
- 12) National Bank of Kenya
- 13) Microfinance Bank Faulu Kenya.

Source: Central Bank of Kenya 2014

Appendix II: List of Licensed Commercial Banks in Kenya as at 31st December, 2014

- 1) Bank of Africa (K) Ltd.
- 2) Bank of India
- 3) Citibank N.A. Kenya
- 4) Bank of Baroda (K) Ltd.
- 5) Barclays Bank of Kenya Ltd.
- 6) Consolidated Bank of Kenya Ltd.
- 7) City Finance Bank Ltd.
- 8) Commercial Bank of Africa Ltd.
- 9) Cooperative Bank of Kenya Ltd.
- 10) Credit Bank Ltd.
- 11) Charterhouse Bank Ltd.
- 12) Chase Bank (K) Ltd.
- 13) Diamond Trust Bank Kenya Ltd.
- 14) Development Bank of Kenya Ltd.
- 15) Ecobank Ltd
- 16) First Community Bank
- 17) K-Rep Bank Ltd.
- 18) Standard Chartered Bank (K) Ltd.
- 19) Gulf Africa Bank (K) Ltd
- 20) Prime Bank Ltd.
- 21) Habit Bank A.G. Zurich
- 22) Habit Bank Ltd.
- 23) Kenya Commercial Bank Ltd.
- 24) National Bank of Kenya Ltd.
- 25) Jamii Bora Bank Ltd.
- 26) CFC Stanbic Bank Ltd.
- 27) African Banking Corporation
- 28) Housing finance ltd (Mortgage financial institution)
- 29) Equatorial Commercial Bank Ltd.
- 30) Equity Bank Ltd.
- 31) Victoria Commercial Bank
- 32) Family Bank Ltd.

- 33) Fidelity Commercial Bank Ltd.
- 34) Fina Bank Ltd.
- 35) Giro Commercial Bank Ltd.
- 36) Guardian Bank Ltd.
- 37) Imperial Bank Ltd.
- 38) Middle East Bank (K) Ltd.
- 39) NIC Bank Ltd.
- 40) Oriental Commercial Bank Ltd.
- 41) Paramount Universal Bank Ltd.
- 42) UBA Kenya Bank Ltd.
- 43) Trans-National Bank Ltd.

Source: Central Bank of Kenya 2014

Appendix III: Raw Data

| 2010 | Profit Before Tax (000) | Total Assets (000) | Loans And Advances (000) | Customer Deposits (000) | Liquidity Ratio |
|-------------------------------|-------------------------|--------------------|--------------------------|-------------------------|-----------------|
| Chase Bank (K) Ltd. | 535,083 | 21,858,591 | 11,130,998 | 16,880,006 | 0.36 |
| Citi Bank Ltd | 2,879,000 | 62,070,000 | 23,817,000 | 38,215,000 | 0.34 |
| Consolidated Bank | 257,748 | 10,204,682 | 6,047,276 | 8,008,438 | 0.33 |
| Cooperative Bank of Kenya Ltd | 5,771 | 154,339 | 90,965 | 129,226 | 0.7 |
| Diamond Trust Bank Kenya Ltd | 3,462,999 | 83,600,177 | 51,260,068 | 66,196,600 | 0.36 |
| Equity Bank Ltd. | 9,311,817 | 133,889,997 | 78,299 | 95,203,089 | 0.4 |
| Family Bank Ltd. | 517,958 | 20,092,120 | 10,200,000 | 15,731,247 | 0.38 |
| Kenya Commercial Bank Ltd. | 9,797,971 | 251,356,200 | 148,113,364 | 196,974,651 | 0.35 |
| NIC Bank Ltd | 2,764,017 | 648,836,223 | 38,340,879 | 45,317,661 | 0.25 |
| K-Rep Bank Ltd | 3,462,999 | 7,670,049 | 5,252,438 | 5,454,468 | 0.3 |
| Ecobank | 187,914 | 26,892,183 | 9,693,275 | 16,493,841 | 0.57 |
| National Bank of Kenya | 2,697,823 | 60,026,694 | 2,302,655 | 47,804,607 | 0.41 |
| Microfinance Bank Faulu Kenya | -157,273 | 4,390,079 | 2,549,152 | 468,906 | 0.21 |

| 2011 | Profit Before Tax (000) | Total Assets (000) | Loans And Advances (000) | Customer Deposits (000) | Liquidity Ratio |
|-------------------------------|-------------------------|--------------------|--------------------------|-------------------------|-----------------|
| Chase Bank (K) Ltd. | 830,171 | 36,449,609 | 18,243,804 | 24,924,000 | 0.43 |
| Citi Bank Ltd | 4,801,887 | 74,646,417 | 28,451,457 | 40,534,172 | 0.36 |
| Consolidated Bank | 246,544 | 15,318,148 | 9,197,024 | 12,010,250 | 0.27 |
| Cooperative Bank of Kenya Ltd | 6,366 | 168,312 | 114,101 | 144,514 | 0.79 |
| Diamond Trust Bank Kenya Ltd | 4,307,413 | 107,765,064 | 71,297,721 | 85,986,399 | 0.36 |
| Equity Bank Ltd. | 12,103,414 | 176,910,996 | 106,486,367 | 121,774,061 | 0.37 |
| Family Bank Ltd. | 522,565 | 26,001,753 | 16,332,359 | 21,443,927 | 0.34 |
| Kenya Commercial Bank Ltd. | 15,129,374 | 330,716,159 | 198,724,919 | 259,308,849 | 0.28 |
| NIC Bank Ltd | 3,696,663 | 73,581,321 | 52,025,475 | 62,008,953 | 0.27 |
| K-Rep Bank Ltd | 255,944 | 9,318,715 | 6,754,243 | 6,446,016 | 0.29 |
| Ecobank | 121,393 | 27,210,496 | 11,380,592 | 16,566,403 | 0.49 |
| National Bank of Kenya | 2,443,850 | 68,664,516 | 3,517,135 | 56,728,163 | 0.34 |
| Microfinance Bank Faulu Kenya | 16,138 | 5,140,576 | 3,237,624 | 598,857 | 0.21 |

| 2012 | Profit Before Tax (000) | Total Assets (000) | Loans And Advances (000) | Customer Deposits (000) | Liquidity Ratio |
|-------------------------------|-------------------------|--------------------|--------------------------|-------------------------|-----------------|
| Chase Bank (K) Ltd. | 1,331,252 | 49,672,063 | 29,742,477 | 36,978,406 | 0.43 |
| Citi Bank Ltd | 7,228,576 | 69,579,795 | 23,331,003 | 44,012,192 | 0.82 |
| Consolidated Bank | 175,938 | 18,000,858 | 10,077,068 | 13,324,851 | 0.47 |
| Cooperative Bank of Kenya Ltd | 9,984 | 200,588 | 123,824 | 163,149 | 0.82 |
| Diamond Trust Bank Kenya Ltd | 6,027,899 | 135,461,412 | 87,707,243 | 106,975,254 | 0.38 |
| Equity Bank Ltd. | 16,059,607 | 215,829,000 | 122,410,013 | 140,285,671 | 0.46 |
| Family Bank Ltd. | 843,240 | 30,985,096 | 17,868,745 | 24,630,278 | 0.34 |
| Kenya Commercial Bank Ltd. | 17,208,143 | 368,428,285 | 211,664,226 | 288,037,367 | 0.36 |
| NIC Bank Ltd | 4,657,085 | 101,771,705 | 66,381,215 | 77,466,042 | 0.35 |
| K-Rep Bank Ltd | 306,211 | 9,546,050 | 6,954,783 | 6,649,643 | 0.28 |
| Ecobank | -1,533,789 | 31,771,339 | 13,968,266 | 21,475,301 | 0.4 |
| National Bank of Kenya | 1,147,408 | 134,333,410 | 29,930,474 | 33,340 | 0.3 |
| Microfinance Bank Faulu Kenya | 83,501 | 7,637,676 | 4,949,198 | 4,464,501 | 0.24 |

| 2013 | Profit Before Tax(000) | Total Assets (000) | Loans And Advances (000) | Customer Deposits (000) | Liquidity Ratio |
|-------------------------------|------------------------|--------------------|--------------------------|-------------------------|-----------------|
| Chase Bank (K) Ltd. | 2,287,074 | 78,768,838 | 41,429,897 | 53,361,000 | 0.4 |
| Citi Bank Ltd | 4,984,275 | 71,242,659 | 24,337,983 | 43,701,732 | 0.63 |
| Consolidated Bank | -142,387 | 16,778,631 | 1,940,870 | 11,711,097 | 0.28 |
| Cooperative Bank of Kenya Ltd | 10,872 | 231,215 | 141,608 | 180,887 | 0.88 |
| Diamond Trust Bank Kenya Ltd | 7,235,003 | 166,520,351 | 110,945,43 | 128,788,398 | 0.33 |
| Equity Bank Ltd. | 19,150,422 | 277,728,818 | 171,363,429 | 194,620,593 | 0.34 |
| Family Bank Ltd. | 1,757,919 | 43,500,988 | 27,900,000 | 34,614,686 | 0.37 |
| Kenya Commercial Bank Ltd. | 20,123,759 | 391,479,179 | 227,721,781 | 305,659,189 | 0.33 |
| NIC Bank Ltd | 5,767,412 | 112,916,814 | 77,114,087 | 84,236,189 | 0.28 |
| K-Rep Bank Ltd | 556,787 | 13,199,239 | 8,892,085 | 9,164,983 | 0.311 |
| Ecobank | -1,231,130 | 36,907,136 | 18,459,837 | 25,350,566 | 0.318 |
| National Bank of Kenya | 1,779,444 | 92,493,035 | 39,566,678 | 77,992,820 | 0.42 |
| Microfinance Bank Faulu Kenya | 237,604 | 12,434,401 | 8,870,000 | 8,683,834 | 0.23 |

| 2014 | Profit Before Tax (000) | Total Assets(000) | Loans And Advances (000) | Customer Deposits (000) | Liquidity Ratio |
|-------------------------------|-------------------------|-------------------|--------------------------|-------------------------|-----------------|
| Chase Bank (K) Ltd. | 3,353,941 | 109,159,000 | 57,236,098 | 79,854,000 | 0.46 |
| Citi Bank Ltd | 1,123,558 | 72,791,900 | 24,012,130 | 45,025,099 | 0.73 |
| Consolidated Bank | -274,190 | 15,077,051 | 1,809,167 | 860,254 | 0.36 |
| Cooperative Bank of Kenya Ltd | 10,916 | 285,396 | 183,942 | 220,858 | 0.83 |
| Diamond Trust Bank Kenya Ltd | 8,521,286 | 211,539,412 | 137,654,551 | 160,955,609 | 0.36 |
| Equity Bank Ltd. | 21,300,196 | 344,571,649 | 214,170,424 | 245,383,135 | 0.3 |
| Family Bank Ltd. | 2,618,359 | 61,812,663 | 37,900,000 | 47,186,425 | 0.41 |
| Kenya Commercial Bank Ltd. | 23,787,429 | 490,338,324 | 283,732,205 | 377,271,886 | 0.31 |
| NIC Bank Ltd | 6,081,281 | 137,087,464 | 92,957,230 | 92,791,078 | 0.32 |
| K-Rep Bank Ltd | 471,975 | 14,462,755 | 10,206,882 | 462,086 | 0.318 |
| Ecobank | -499,252 | 45,934,458 | 22,982,094 | 32,413,989 | 0.399 |
| National Bank of Kenya | 2,431,685 | 123,091,996 | 65,641,491 | 104,733,709 | 0.315 |
| Microfinance Bank Faulu Kenya | 431,571 | 20,319,958 | 14,400,307 | 12,646,278 | 0.24 |

World Development Indicators

| Country Name | Country Code | Indicator Name | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------|--------------|--|----------|----------|----------|----------|----------|
| Kenya | KEN | Money and quasi money (M2) as % of GDP | 40.30964 | 40.85457 | 40.86429 | 41.53439 | 42.92716 |

Source: World Bank Database