

**THE EFFECT OF AGENCY BANKING ON FINANCIAL PERFORMANCE OF
COMMERCIAL BANKS IN KENYA**

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DECLARATION

I declare that this Research Project is my original work and has never been submitted for a degree in any other university or college for examination/academic purposes.

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DEDICATION

This research project is dedicated to my family more especially my mother Elizabeth Moraa Ratemo for having supported and encouraged me throughout my academic life.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
LIST OF TABLES	viii
ABSTRACT	ix
LIST OF ABBREVIATIONS	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Agency Banking	2
1.1.2 Financial Performance	4
1.1.3 Effect of Agency Banking on Financial Performance.....	6
1.1.4 Commercial Banks in Kenya.....	6
1.2 Research Problem	8
1.3 Objective of the Study	10
1.4 Value of the Study	10
CHAPTER TWO: LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Theoretical Review	12
2.2.1 Agency Theory	12
2.2.2 Competitive Advantage Theory	14
2.2.3 Bank-led Theory	16
2.3 Determinants of Bank Financial Performance	16
2.3.1 Internal Factors/Bank Specific Factors	17
2.3.2 External Factors/ Macroeconomic Factors	20

2.4 Empirical Review	21
2.4.1 International Literature	21
2.4.2 Local Evidence	22
2.5 Summary of Literature Review	23
CHAPTER THREE: RESEARCH METHODOLOGY	25
3.1 Introduction	25
3.2 Research Design	25
3.3 Population.....	25
3.4 Data Collection.....	26
3.5 Data Analysis	26
3.5.1 Test for Significance	27
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATIONS	29
4.1 Introduction	29
4.2 Descriptive Statistics	29
4.2.1 Volume of Cash Deposits	29
4.2.2 Cash Withdrawals in the 16 Commercial Banks	30
4.2.3 Liquidity	31
4.2.4 Number of Accounts Opened	32
4.2.5 Trend in Transactions Carried Out in the Year 2012	32
4.2.6 Trend in Transactions Carried Out in the Year 2013.....	33
4.2.7 Trend in Transactions Carried Out in the Year 2014	35
4.3 Correlations	35
4.4 Multiple Regression 2012 to 2014	37
4.5 Interpretation of the Findings	41

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS .	44
5.1 Introduction	44
5.2 Summary of the Findings	44
5.3 Discussion of the Findings	45
5.4 Conclusions	47
5.5 Limitations of the Study	48
5.6 Recommendations	49
5.6.1 Recommended Areas of Further Research	49
REFERENCES	50
APPENDICES	54
Appendix 1: Commercial Banks Registered In Kenya as at 30 th December 2014	54
Appendix II: Commercial Banks Adopting Agency Banking In Kenya as At 30 th December 2014	56

LIST OF TABLES

Table 4.1: Volume of Cash Deposits.....	29
Table 4.2: Cash Withdrawals	30
Table 4.3: Number of Agents	31
Table 4.4: Descriptive Statistics on Liquidity Levels	31
Table 4.5: Number of Accounts Opened.....	32
Table 4.6: Correlations	36
Table 4.7: Model Summary 2014.....	38
Table 4.8: Analysis of Variance	39
Table 4.9: Coefficients a 2014	39

ABSTRACT

Seventy percent of Kenyan population have no access to any formal banking services therefore agents play a crucial role in ensuring accessibility of financial services by customers in areas where banks cannot be able to establish branches. Through agents, banks are able to increase their market share, mobilize deposits and generate income through transactions fees at low cost. The equipment needed by agents to effectively operate differ from bank to bank .In some banks; an agent only needs POS card reader, mobile phone, barcode scanner and PIN pads while others may use personal computers. All these are normally connected to the bank's core system servers. Expanding access to financial services holds the promise to help reduce poverty and spur economic development but as a practical matter, commercial banks have faced challenges expanding access to poor and low-income households in developing economies, and nonprofits have had limited reach. Innovations therefore such as agency banking intend to improve the quantity and quality of financial access. The main objective was to determine is to establish the effect of agency banking on various performance indicators of commercial banks in Kenya. The study was based on agency theory in which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. Agency theory is the study of the agency relationship and the issues that arise from this, particularly the dilemma that the principal and agent, while nominally working toward the same goal, may not always share the same interests. The research was conducted using a descriptive survey which involved analyzing of secondary data. The study was carried out on 16 Commercial banks offering agency banking in Kenya. The methodology used entailed use of inferential statistics using statistical package for social sciences (SPSS) package. Inferential statistics was based on Pearson correlation analysis and a multiple regression model. Multiple regression models were used for it allows simultaneous investigation of the effect of two or more variables. The study found a positive correlation between volume of cash deposits, Withdrawals, Number of agents and ROE. In addition the study found a negative correlation between levels of liquidity and Return on Equity. The study concluded that Agency banking has experienced tremendous growth and complexity of the transactions been handled. The nature of transactions performed by agents confirmed that most of the agents are not knowledgeable of other operations that the banks can offer. The study recommended that banks should allow agents to perform core activities like vetting loan applications and collecting loan repayment, it is recommended that the banks transfer the basic knowledge to the agents to enable them perform these extra activities. Measures to secure the agents should also be taken by the banks to empower the agents transact greater volumes and value. The risk to the agent is too high and most will shy away from been key dealers due to insecurity therefore that study recommends that the banks should assist agents overcome this challenge to ensure greater penetration in areas that would otherwise be deemed insecure to operate from.

LIST OF ABBREVIATIONS

CBK	-	Central Bank of Kenya
CGAP	-	Consultative Group to Assist the Poor
CRB	-	Credit reference Bureau
GAFIS	-	Gateway Financial Innovations for Savings
KYC	-	Know Your Customer
MFBs	-	Micro Finance Banks
PIN	-	Personal Identification Number
POS	-	Point-of-Sale
ROA	-	Return on Assets
ROE	-	Return on Equity
ROI	-	Return on Investments
SPSS	-	Statistical Package for Social Science

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Seventy percent of Kenyan population have no access to any formal banking services therefore agents play a crucial role in ensuring accessibility of financial services by customers in areas where banks cannot be able to establish branches. Through agents, banks are able to increase their market share, mobilize deposits and generate income through transactions fees at low cost. The equipment needed by agents to effectively operate differ from bank to bank .In some banks; an agent only needs POS card reader, mobile phone, barcode scanner and PIN pads while others may use personal computers. All these are normally connected to the bank's core system servers.

According to Cohen (2002) the ongoing global expansion of a high-tech telecommunications infrastructure, coupled with the increased availability of advanced information technology services, is having an impact on almost every emerging industry. Emerging industries have been created by technological innovations, shifts in relative cost relationships, emergence of new consumer needs or other economic and sociological changes that evaluate a new product or service to the level of a potentially viable business opportunity. The agency banking model is expected to continue playing a catalytic role in expanding the reach of banks within a rapidly changing technological environment.

1.1.1 Agency Banking

Agency banking is an arrangement by which licensed institutions (banks and microfinance banks) engage third parties to offer specified banking services on behalf of the institution. In Kenya, agency banking is governed by the prudential guidelines on agent banking (CBK/PG/15) issued by the central bank (CBK). Banking agent is a retail or postal outlet contracted by a financial institution or a mobile network operator to process clients' transactions. Rather than a branch teller, it is the owner or an employee of the retail outlet who conducts the transaction and lets clients deposit, withdraw, and transfer funds, pay their bills, inquire about an account balance, or receive government benefits or a direct deposit from their employer. Banking agents can be pharmacies, supermarkets, convenience stores, lottery outlets, post offices, and many more (Atieno, 2001).

Through cost-effective agency banking networks, customers access banking services in kiosks around the country, particularly in remote, previously unbanked territories. Agency banking has enabled bank customers to access the basic banking services, for example, cash deposit, cash withdrawal and bank balance inquiry conveniently or what would be termed as within the comfort of their neighborhood. The convenience of access to banking services and the extended hours that the agencies work has been the most attractive features to the customer (Ivatury & Lyman, 2006).

Banking agents help financial institutions to divert existing customers from crowded branches providing a complementary, often more convenient channel. Other financial institutions, especially in developing markets, use agents to reach an additional client segment or geography. Reaching poor clients in rural areas is often prohibitively expensive

for financial institutions since transaction numbers and volumes do not cover the cost of a branch. In such environments banking agents that piggy back on existing retail infrastructure and lower set up and running cost can play a vital role in offering many low-income people their first-time access to a range of financial services. Also, low-income clients often feel more comfortable banking at their local store than walking into a marble branch. (Kitaka, 2001).

Gardner (2000) contends that agency banking systems are up to three times cheaper to operate than branches for two reasons. First, agent banking minimizes fixed costs by leveraging existing retail outlets and reducing the need for financial agent banks to invest in their own infrastructure. Although agent banking incurs higher variable costs from commissions to agents and communications, fixed costs per transaction for branches are significantly higher.

When financial agent banks do not have branches that are close to the customer, the customer is less likely to use and transact with their service. However, the emergence of new delivery models as a way to bank has played a key role to drastically change the economics of banking by the poor. By using retail points as agents banking providers can offer banking services in a commercially viable way since they are able to reduce fixed costs and encourage entrepreneurs to use the service more often and in the process provide access to additional revenue sources (Ayuma, Mugambi 2013).

In Kenya, as at December 2014, 16 commercial banks and 3 microfinance banks had contracted 35,789 and 58 agents, respectively, spread across the country. This was a marked improvement from 13 commercial banks (and no microfinance banks) with a total

of 23,477 agents by the end of December 2013. This represents a 52.4% increase in the number of approved agents, with a concentration of 90% of the agents in 3 banks; Equity Bank with 13,767 agents, Kenya Commercial Bank with 9,687 and Cooperative Bank with 8,765. The number of transactions by agents increased by 37.9% from 42,055,854 transactions recorded in 2013 to 57,995,472 in December 2014 (CBK, 2014).

1.1.2 Financial Performance

Financial performance refers as a firm's ability to generate new resources from day to day operations over a given period of time. Financial performance can be based on traditional measures that use accounting/financial data that include return on investments (ROI), return on equity (ROE) and return on assets (ROA) which reflect a firm's past performance (Bora, and Bulut, 2008).

According to Ndirangu (2013) financial performance is conclusions drawn from financial analysis of a firm. Financial analysis is the selection, evaluation, and interpretation of financial data, along with other pertinent information, to assist in investment and financial decision-making. Financial analysis may be used internally to evaluate issues such as employee performance, the efficiency of operations, and credit policies, and externally to evaluate potential investments and the credit-worthiness of borrowers, among other things Jacob (2006) identifies several ways of measuring financial performance line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. The analyst or investor may also wish to look deeper into financial statements and seek out margin growth rates or any declining debt. The measures of financial performance of a business include:

Profit: This refers to how much a business is making. The point of reference can be the P&L (Profit and Loss Statement aka Income Statement). Profit describes how much wealth the company created (profit) or consumed (loss) over a certain period of time

Cash flow: shows the amount of cash generated and used by a company in a given period. It is calculated by adding noncash charges (such as depreciation) to net income after taxes. Cash flow can be attributed to a specific project, or to a business as a whole. Cash flow can be used as an indication of a company's financial strength.

Balance sheet strength: is a reflection of what the company owns and owes. The strength of a company's balance sheet can be evaluated by three broad categories of investment-quality measurements: working capital adequacy, asset performance and capitalization structure.

Risk: Business is risky. You might not get paid by a customer, you might default on a bank loan, your company might get sued, etc. Risk is sometimes defined as probability times consequence, the likelihood of something occurring multiplied by the damage it would cause if it does occur. To earn the same amount of profit with less risk is good. Or, to earn more profit with the same amount of risk is good.

Valuation: What is the fair market value (FMV) of your business? Is it rising or falling? In addition to providing current income, businesses create wealth for their owners by having a resale value. When it comes time for you to sell your business (whole or in part), a higher business valuation is better.

1.1.3 Effect of Agency Banking on Financial Performance

Financial innovations such as agency banking will be beneficial to Commercial banks in Kenya. This expected to improve financial performance of the commercial banks as they will help cut costs on expansion and staffing but it is important that the banks have clear strategic rationale for each agent it sets up. It costs much less to use banking agents than to set up bank branches. For the price of one branch, 40 banking agents can be opened. Furthermore, agents may be helping banks attract customers who would otherwise shy away from using a bank branch. Poor clients may be more comfortable banking at their local merchant, in part because rural clients (Sidiek, 2008).

In 2014 there was overall increase in the value of transactions, the payment of bills being most popular transaction in number and value given the convenience the technology platform provides for utility bill payments. Agents also moved approximately 138.8 million transactions accumulatively valued at Kshs 752.47 billion (USD 8.3 billion). This was a marked improvement from 2013. This shows the growing popularity of the technology platform in providing convenient and easily accessible financial products and services (CBK, 2014).

1.1.4 Commercial Banks in Kenya

A commercial bank means a company which carries on, or proposes to carry on, banking business in Kenya and includes the Co-operative Bank of Kenya Limited but does not include the Central Bank of Kenya (CBK).

Banking business means; the accepting from members of the public of money on deposit repayable on demand or at the expiry of a fixed period or after notice, the accepting from members of the public of money on current account and payment on and acceptance of cheques and the employing of money held on deposit or on current account, or any part of the money, by lending, investment or in any other manner for the account and at the risk of the person so employing the money (CBK).

As at 31st December 2014, the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions (43 commercial banks and 1 mortgage finance company), 8 representative offices of foreign banks, 9 Microfinance Banks (MFBs), 2 Credit Reference Bureaus (CRBs), 13 Money Remittance Providers (MRPs) and 87 Foreign Exchange (forex) Bureaus. Out of the 44 banking institutions, 30 were locally owned banks comprised 3 with public shareholding and 27 privately owned while 14 were foreign owned (CBK, 2014).

By December 2014, 16 commercial banks and 3 microfinance banks had contracted 35,789 and 58 agents, respectively, spread across the country. This was a marked improvement from 13 commercial banks (and no microfinance banks) with a total of 23,477 agents by the end of December 2013. This represents a 52.4% increase in the number of approved agents, with a concentration of 90% of the agents in 3 banks; Equity Bank with 13,767 agents, Kenya Commercial Bank with 9,687 and Cooperative Bank with 8,765 (CBK, 2014).

1.2 Research Problem

Expanding access to financial services holds the promise to help reduce poverty and spur economic development but as a practical matter, commercial banks have faced challenges expanding access to poor and low-income households in developing economies, and nonprofits have had limited reach. Innovations therefore such as agency banking intend to improve the quantity and quality of financial access (Karlan & Morduch, 2009).

Kumar, Nair, Parsons and Urdapilleta (2006) argue that agency banking allows banks to serve more clients at lower cost, increases reach into areas where a full branch would not be cost-justified, and allows clients to access their accounts more frequently and manage their loan funds more easily thus leading to increased revenue. However, Ivatury and Lyman (2006) pointed at challenges facing agency banks such as loss of confidentiality of customer information; location of the agents in high risk areas poses security threat; poor customer service to the bank customer as the agents are not well trained; and, susceptibility of the agents to fraudulent transactions.

Mwangi (2011) evaluated the role of agency banking in the performance of commercial banks in Kenya. The study was done on four banks offering agency banking services using questionnaires distributed to the banks' branch managers. The study established that infrastructure cost and security influence the performance of commercial banks attributable to agency banking to a very great extent. The study recommends that agency banking should be given more attention on security measures including risk-based approach and that the banks should find better ways of screening their agents to ensure that the large cash transactions handling is effectively carried out on their behalf; secure operating systems capable of carrying out real time transactions, generating an audit trail, and protecting data confidentiality and integrity.

Kamau (2012) studied the relationship between agency banking and financial performance of the banks in Kenya. Through review of secondary data, the study found that agency banking outlets were 9,748 active agents in 2011 from 8,809 in 2010 facilitating a total volume of 8.7 million transactions valued at KSh 43.6 billion. Using regression analysis, the study negative and weak correlation between number of agents, deposit and withdrawals transactions undertaken through agents and financial performance of banks as measured by return on equity.

Waithanji (2012) sought to establish effect of agent banking as a financial deepening initiative in Kenya. Descriptive statistics were used for the analysis. The findings revealed lack of connection between agent banking and financial deepening. Waithanji noted that the relationship could not be conclusively determined due to the low number of banks that have implemented it and impact may become clearer once all banks adopt agency banking.

In his findings between 2011 and 2012, Ndirangu (2013) contends that there was zero agent activity. The study carried out shed light on the fact that the number of agents operated by a commercial banks and the resultant volume of transactions (Deposits and withdrawals) are not directly correlated with the banks financial performance as measured by the return on equity. This was further supported by the fact that the R Square for both 2011 and 2012 were considerably low indicating a weak correlation between the predictors and the independent variables as highlighted in the regression analysis models. This is supported by the outcome on the resulting equation where the coefficients of the predictor variables are considerably low. In conclusion he found out that the agency banking model has insignificant effect on the banks financial performance.

In spite of these findings, there has been an increase in agency banking activities as indicated in the Central bank of Kenya supervisory report of 2014. This study addressed the following research question: what is the effect of agency banking on financial performance of commercial banks in Kenya? The study is pegged on three theories; agency theory, porter's competitive theory and bank-led theory that support agency banking.

1.3 Objective of the Study

The main objective was to determine is to establish the effect of agency banking on various performance indicators of commercial banks in Kenya.

1.4 Value of the Study

The study will make valuable contribution to the following areas and people; Commercial banks:

The study will enable management of commercial banks to strengthen the effective and efficient running of agency banking.

The commercial banks will be able to appreciate the importance of adopting agency banking as a measure of improving financial performance.

Banking agents: Banking agents will be able to appreciate the benefits of being agents which will lead to growth and expansion of agent outlets leading better financial performance and business growth.

Scholars and theory: Scholars and academicians can use findings of the study to build on the theory of information technology and its utilization in agency banking. Further research related areas and gaps can also be identified for study hence building the theory of Agency Banking and development better products and in turn improve financial performance of not only commercial banks but also other financial services providers.

Policy makers: By identifying the challenges facing commercial banks on implementation of agency banking, policy makers such as Government, industry regulators like CBK, Kenya Bankers Association (KBA), Communications Commission of Kenya (CCK) and other relevant Government agencies can use the result of the study to assist commercial banks and terms of reviewing and coming up with legislations that will ease the expansion and implementation of agency banking technology.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on theoretical and empirical literature. It will look into previous researches that have been done to address the research problem and their findings. The literature will be reviewed from various sources including books, working papers, journals, periodicals, internet sources and reports from various agencies.

2.2 Theoretical Review

This study was guided by various theories that support agency banking that include agency theory, porter's competitive theory and bank-led theory.

2.2.1 Agency Theory

An agency relationship is one in which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. Agency theory is the study of the agency relationship and the issues that arise from this, particularly the dilemma that the principal and agent, while nominally working toward the same goal, may not always share the same interests. The literature on agency theory largely focuses on methods and systems and their consequences that arise to try to align the interests of the principal and agent.

If banks are to achieve the goal of moving larger numbers of clients into deeper services, the conceptualization of financial inclusion must move beyond account opening towards significant, useful engagement of the poor. Doing so can provide sustained net benefits both to the newly-banked poor and to the financial institutions serving them. In order to get

to that deeper level of engagement will require banks to develop and leverage gateway opportunities: providing innovative products that poorer customer's value and helping them achieve stronger, more balanced savings portfolios. By doing this, banks may be able to achieve the account balances, transaction volumes and cross-sales opportunities that make providing such services a viable business proposition (GAFIS Focus Notes, 2014).

Ross (1972) outlined agency as a universal principle and not just a theory of the firm. He addressed the problem of incentive and laid out a model for inducing the agent to produce maximum gains for the principal. Mitnik (1973) laid out a much more general theory of agency with possible application to numerous societal contexts. He identified the problems of agency as 1) the principal's problem, 2) the agent's problem, 3) policing mechanisms and incentives. The principal's problem is to motivate the agent to act in a manner that will achieve the principal's goals. The agent's problem is that he may be faced with decisions to act either in the principal's interest, his own interest, or some compromise between the two when they do not coincide. Policing mechanisms are mechanisms and incentives intended to limit the agent's discretion, such as surveillance or specifically directed tasks. He applied regulation extensively and introduced the study of delegation as the creation of agents in governments. Mitnick concluded by noting that he had created only a basic framework around which to further develop agency theory.

Jensen and Meckling (1976) explored agency costs and its sources. They identified monitoring the agent's actions as a source of agency cost, but they also identify at least two other sources: bonding costs borne by the agent (such as bonding against malfeasance, contractual limitations on his power, which limits his ability to take full advantage of

profitable opportunities, foregoing certain non-pecuniary benefits) and the wealth loss borne by the principal when the agent's actions do not maximize his welfare referred to as “residual loss”.

In commercial banking, agency problems may arise from three principal sources: partial ownership of a banking firm by individuals who are both owners and managers who may behave differently than utility-maximizing owners alone; the presence of government-sponsored deposit insurance programs that do not differentially price insurance coverage to reflect the risk exposure of each banking firm and that can elect to delay recognition of a bankruptcy, creating a moral hazard because management and stockholders can pursue high-risk investments in an attempt to transfer wealth from depositors to shareholders; and, the existence of informational asymmetry where owners and managers do not share the same information (Aduda et al, 2013).

2.2.2 Competitive Advantage Theory

Porter (1980) came up with a five forces analysis that can help organizations to understand the factors affecting profitability in a specific industry, and can help to inform decisions relating to: whether to enter a specific industry; whether to increase capacity in a specific industry; and developing competitive strategies. He identified two types of competitive advantage an organization can achieve relative to its rivals: lower cost or differentiation. This advantage derives from attribute(s) that allow an organization to outperform its competition, such as superior market position, skills, or resources (Porter, 1980). In Porter's view, strategic management should be concerned with building and sustaining competitive advantage. He emphasizes productivity growth as the focus of national strategies.

Competitive advantage is a business concept describing attributes that allow an organization to outperform its competitors, this may include market positioning. This is relative location in customer's mind among opponent products. Positioning can be formed according to the specific features, benefits or the usage of the product, and also a positioning can be developed as directly against the major opponent or as being different from the opponent (Mustafa, 2009).

Ries and Trout (1969) positioning approach, explains the role of competitors with resembling marketing and war each other. Ries and Trout indicate that without taking competitors into consideration the war of marketing cannot be won. They developed this concept in books ('Marketing Warfare', 'Battle of Your Mind'), and recommended marketers to read war history and famous commanders. Another important assumption of the positioning approach is that many products are perceived or evaluated with others-competitors (Trout, 1981). Organizations therefore strive to gain competitive advantage which positions them better within the business environment.

In reference to agency banking, adoption of agency banking model by commercial banks leads to competitive advantage on the banks. Failure to adopt agency banking by the firms implies that some banks will be better off than the others and hence, for the banks to remain relevant, they ought to adopt agency banking model. The banking industry in Kenya has been characterized by stiff competition between the banks with each competing for market leadership. It is advantageous for any bank when it is a market leader because it has significant financial benefits which then lead to consistently and focus on quality; it also enhances the use of the full range of banking tools to solidify

performance and leads to ownership of core benefits with a balance of national and economic messages. The secret of gaining competitive advantage among the banking service provider is by building themselves as brand and target to retain brand loyalty by enhancing brand presence where it is limited and this has been achieved embracing agency banking (Githemo, 2014).

2.2.3 Bank-led Theory

Lyman, Ivatury, and Stachen (2006), argue that in bank-led theory, a licensed financial institution delivers financial services through a retail agent i.e. the bank develops the financial products and services but distributes them through a retail agent who on the other hand handles all or most customer interaction. Customers are able to access the mix of financial and non-financial service available. To enable retail agents to facilitate the communication between the customer and the bank, the bank is responsible for installing electronic technology such as mobile phones or POS devices for the retail agent. In this theory the bank is the main provider of the financial services and customers maintain their accounts with the bank. Retail agents interact with the customer face-to-face and perform cash handling. The bank is the ultimate provider of financial services and is the institution in which customers maintain accounts. Retail agents 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 (Owens, 2006).

2.3 Determinants of Bank Financial Performance

The determinants of bank performances can be classified into internal (bank specific) and external (macro-economic) factors (Al-tamimi, 2010). Internal factors are individual bank

characteristics which affect the banks performance. These factors are basically influenced by internal decisions made by management and the board. External factors are industrial, national and global factors that are beyond the control of the company but affect the performance of banks.

The Kenyan banking sector recorded improved performance in 2014 compared to 2013. The pre-tax profit for the sector increased by 12.2 per cent from Ksh.125.8 billion in December 2013 to Ksh.141.1 billion in December 2014. Total net assets rose by 18.5 per cent from Ksh. 2.7 trillion in December 2013 to Ksh. 3.2 trillion in December 2014. Customer deposits, on the other hand, rose by 18.65 per cent from Ksh. 1.93 trillion in December 2013 to Ksh.2.29 trillion in December 2014 (CBK, 2014).

2.3.1 Internal Factors/Bank Specific Factors

Internal factors are individual bank characteristics which affect the banks performance. These factors are basically influenced by internal decisions made by management and the board. They include Management efficiency, asset quality, capital adequacy, and liquidity management.

Management efficiency: Management efficiency relates to the use of all inputs in producing any given output, including personal time and energy. Decisions made by management should promote efficiency and reduce wastage thereby maximizing return. Efforts to increase productivity would be included in this category. It is represented by different financial ratios like total assets growth, loan growth rate and earnings growth rate. Operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively

through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Some financial ratios of the financial statements act as a proxy for management efficiency. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios (Ongore, Kusa 2013).

Some of the ratios used include operating profit to income ratio (Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al. 2005).

Asset quality: The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of the bank (Athanasoglou et al., 2005). Loan is the major asset of commercial banks from which they generate income. The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has a direct impact on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Non performing loans ratios are normally used to measure asset quality therefore it the major concern of all commercial banks to keep the amount of nonperforming loans to low level. A low ratio of nonperforming loans to total loans shows that the bank is performing well (Sangmi and Nazir, 2010).

Capital adequacy: Capital is the amount of own fund available to support the bank's business and act as a buffer in case of shocks (Athanasoglou et al. 2005). Enough capital ensures liquidity for the bank and reduces chances of financial distress. Capital adequacy ratio (CAR) measures capital adequacy by showing the internal strength of the bank to withstand losses during crisis (Dang, 2011). Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

As a regulatory requirement, in 2012 the Central Bank of Kenya (CBK) implemented a requirement that all banks need to build their core capital to KES 1 billion (USD 12 million) up from KES 250 million (USD 4 million) in 2008. The argument from the CBK's perspective is that increased capital base is important for financial sector stability and may lead to cost reduction from economies of scale which may lead to lower prices (lending rates). In the 2015 budget speech, the Treasury secretary proposed that the Central Bank of Kenya (CBK) would increase minimum capital base requirement for all commercial banks to five billion by 2018 (Business daily, 2015).

Liquidity management: Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. Liquid assets (such as cash, central bank reserves or government bonds) are normally held as a buffer to mitigate against the risk of liquidity crises caused where other sources of funding dry up. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. Customer deposit to total asset and total loan to customer deposit are the most commonly used financial ratios to indicate the liquidity position of a bank.

According to CBK 2014 supervisory reports, the liquidity ratio stood at 37.7 per cent as at December 2014 compared to 38.6 per cent registered in December 2013. The marginal decline in the liquidity ratio is attributable to the increased lending in 2014 as reflected in the increase in loans to deposits ratio from 81.6 per cent in 2013 to 83.1 per cent in 2014. It is worth noting that the liquidity in 2014 was way above the statutory minimum of 20.0 per cent.

2.3.2 External Factors/ Macroeconomic Factors

Macro-economic variables include Interest rates, inflation, policy stability, Gross Domestic Product and Political stability. Interest rates are the charges levied by the banks for lending a loan. Increase in Interest rates will directly influence the business as businesses borrow money from the banks from time to time. Increase in interest rates will lead to higher interest expense: Businesses will have to incur higher costs to repay the loan Interest rates represent the cost of borrowing capital for a given period of time. Price changes are anticipated in the world and these expectations are part of the process that determines interest rates (Gardner and Cooperman, 2005).

Inflation there will be an increase in the level of prices of products and services over a specific period of time. As a result the firms will have to incur higher costs of operations. High inflation can decrease the real rate of return on assets (John & Bruce, 2003).

GDP (Gross Domestic product) refers to the total amount of goods and services a country produces. The trend of GDP affects the demand for bank assets. Gross Domestic Product (GDP) is the market value of all officially recognized final goods and services produced within a country in a given year, or over a given period of time. It's often

used as an indicator of a country's material standard of living. During the declining GDP growth, the demand for credit fall which in turn negatively affects the profitability of banks. During boom the demand for credit is high compared to recession (Athanasoglou et al., 2005).

2.4 Empirical Review

This section reviews the local and international studies on agency banking and financial performance of commercial banks. The studies have been discussed in relation to the methodology adopted, the findings and the conclusions of the various studies.

2.4.1 International Literature

Kumar, Nair, Parsons and Urdapilleta (2006) argue that agency banking allows banks to serve more clients at lower cost, increases reach into areas where a full branch would not be cost-justified, and allows clients to access their accounts more frequently and manage their loan funds more easily thus leading to increased revenue.

Podpiera (2008) argues that agent banking does improve the economics for these institutions compared with branches, especially for high-transaction, low-balance accounts that are common among poor users. The analysis focuses on four types of agent banking delivery channels: POS-enabled bank agent; this is an agent managed by a bank that uses a payment card to identify entrepreneurs.

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. Some of the concerns include cases where agents could

threaten bank branches, Brazilian regulation originally allowed agents only in municipalities that did not have bank branches. These restrictions can negatively impact viable agent-based banking thereby hindering the efforts of banks to reach more people and provision of financial services to the rural poor. However, these regulations can have a positive impact as it imposes some form of fit and proper requirements, mandating a form of agent due diligence that requires financial institutions to verify that aspiring agents are ethical.

2.4.2 Local Evidence

Various local studies have been done on the role of agency banking in the performance of commercial banks in Kenya. Kamau (2012) studied the relationship between agency banking and financial performance of banks in Kenya. Using regression analysis, the study gave a negative and weak correlation between number of agents, deposits and withdrawal transactions undertaken through agents and financial performance of banks as measured by Return on Equity.

Ndirangu (2013) sought to find out the effect agency banking has on financial performance of commercial banks in Kenya between 2011 and 2012. He used a sample of 10 banks which had adopted agency banking out of the 44 licensed banks. He contends that there was zero agent activity. The study carried out shed light on the fact that the number of agents operated by a commercial banks and the resultant volume of transactions (Deposits and withdrawals) are not directly correlated with the banks financial performance as measured by the return on equity. This was further supported by the fact that the R Square for both 2011 and 2012 were considerably low indicating a weak correlation

between the predictors and the independent variables as highlighted in the regression analysis models. This is supported by the outcome on the resulting equation where the coefficients of the predictor variables are considerably low. In conclusion he found out that the agency banking model has insignificant effect on the banks financial performance.

Ogetange (2014) looked at effects of agency banking on financial performance of banks in Kenya. Annual reports on individual banks' financial performance were used to extract financial performance indicators. CBK annual report and supervisory reports was also used to establish the number of agents registered and the total transactional value conducted through the agents. She used regression analysis to find the relationship between agency banking in terms of number of agents and the volume of deposit, withdrawals, and loan repayment transactions undertaken through agents and the financial performance measured by return on equity. In her findings concluded that majority of the banks in the country have not embraced agency banking where out of the 43 licensed only 13 out of the licensed rolled up with the agency banking service. She further concluded from her findings that Equity Bank is the most performing commercial bank as far as agency banking is concerned followed by Cooperative Bank and Kenya Commercial Bank. She however noted that agency banking has positively and significantly influenced performance of commercial banks.

2.5 Summary of Literature Review

Despite the growth of agency banking in Kenya, research into the field remains limited. Kamau (2012) undertook a study on the relationship between agency banking and financial performance of banks in Kenya and established a negative and weak correlation

between the two. Mwangi (2011) sought to establish the role of agency banking on the performance of commercial banks and established that cost effectiveness associated with agency banks positively influence banks financial performance.

Waithanji (2012) as part of limitations to her study stated that relationship between agency banking and financial deepening could not be conclusively determined due to the low number of banks that have implemented it and impact may become clearer once all banks adopt agency banking.

Ndirangu (2013) also used data from only 10 banks that had adopted agency banking to draw conclusions on the effect of agency banking on performance of commercial banks in Kenya. He concluded that the agency banking model has insignificant effect on the banks financial performance. Ogetange (2014), analyses the effect of agency banking on 13 banks that had adopted agency banking by the end of 2013. In her findings, she concluded that majority of the banks in the country have not embraced agency banking where out of the 43 licensed only 13 out of the licensed rolled up with the agency banking service.

However, these studies were conducted on very few banks that had implemented agency banking and as such the findings might be outdated or might not be a true reflection of the current state since more banks have adopted agency banking and the variables used by the researchers keep changing in terms of volumes. The relationship could also not be conclusive due to the fact that few banks had implemented agency banking and the impact may be felt once more banks adopt it. To date a total of 16 banks have taken up agency banking (CBK 2014).It is against this background the study arises to fill the knowledge gap by studying the effect of agency banking on financial performance of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology of the study and it highlighted a full description of the design, the research design variables and provided a broad view of the description and selection of the target population. The sampling procedures, the research instruments, data collection techniques and data analysis procedures used in this study are explained in depth in this chapter. The methodology procedures were adopted to attain acceptable validity and reliability of the research tools used in the study.

3.2 Research Design

The research was conducted using a descriptive survey which involved analyzing of secondary data. The required information was acquired from annual CBK supervisory reports which is secondary source backing my research. The banks examined are 16 Commercial banks offering agency banking (Appendix 11). Descriptive design was the most favorable as it enables the study test the relationship between agency banking and financial performance of banks.

3.3 Population

The study was carried out on 16 Commercial banks offering agency banking in Kenya (Appendix 11) as at 31st December 2014 (CBK, 2014).

3.4 Data Collection

Secondary data obtained from the annual CBK, 2014 bank supervision report was used. Relevant data for the study were volume of cash withdrawals, number of agents, volume of cash deposits through bank agents, volume of loans repayments and number of accounts opened through agency banking facilitated by the agency outlets which forms the variables to be used in analysis.

3.5 Data Analysis

The methodology used entailed use of inferential statistics using statistical package for social sciences (SPSS) package. Inferential statistics was based on Pearson correlation analysis and a multiple regression model. Multiple regression models were used for it allows simultaneous investigation of the effect of two or more variables .The model established the relationship between agency banking and the performance of the affected Banks financial performance using various key performance indicators. The equation that represented the algebraic expression of the analytic model applied was as follows.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

Where,

Y=Financial performance measure.

α =Regression constant

β_1 to β_6 =Regression coefficients

X_1 =Number of Agents

X_2 = Volume of cash deposits done through bank agents divided by total cash deposits

X_3 = Volume of cash withdrawals transactions done through bank agents divided by total cash withdrawal transactions

X_4 = Volume of loans repayments via Agency banking divided by total loan repayment

X_5 = Number of accounts opened through agency banking divided by total accounts opened.

X_6 = Liquidity (Liquid assets/Short term liabilities)-This is an indicator of a company's

Short-term liquidity. The ratio measures a company's ability to meet its short-term

Obligations with its most liquid assets through agents. The higher the liquidity ratio, the better the company's liquidity position.

ε = coefficient of error.

The variables of interest were: the cash withdrawal and deposit transactions done through agents; number of accounts opened through agents; number of active agents; and ROE which is an important indicator of profitability.

3.5.1 Test for Significance

The researcher used analysis of variance (ANOVA) to determine this significance level using the received data from CBK. The test was used to check if a linear statistical relationship exists between the dependent variable and at least one of the predictor variables. Dependent variable was banks performance and predictors (constants) were volume of cash withdrawals, number of agents, volume of cash deposits through bank agents, volume of loans repayments and number of accounts opened through agency banking. The credible source of information, CBK will boost reliability and credibility of the research.

Coefficient of correlation (R) were used to determine the magnitude of the relationship between the dependent and independent variables. Coefficient of determination (R^2) was also be used to show the percentage for which each independent variable and all independent variables combined were explaining the change in the dependent variable.

If the test concludes that the correlation coefficient is significantly different from zero (0); "significant", meaning that "there is sufficient evidence to conclude that there is a significant linear relationship between x and y because the correlation coefficient is significantly different from zero (0)." Regression line can therefore be used to model the linear relationship between x and y in the population. If the test concludes that the correlation coefficient is not significantly different from zero (0) (it is close to zero (0)); "not significant", meaning that "there is insufficient evidence to conclude that there is a significant linear relationship between x and y because the correlation coefficient is not significantly different from zero (0)." Regression line can therefore NOT be used a linear relationship between x and y in the population.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

4.1 Introduction

This chapter presents the analysis of secondary, descriptive analysis and inferential analysis that would be used. The descriptive analysis helps the study to describe the relevant aspects of the phenomena under consideration and provide detailed information about each relevant variable. For the inferential analysis, the study used the Pearson correlation, the panel data regression analysis and the t-test statistics.

4.2 Descriptive Statistics

4.2.1 Volume of Cash Deposits

The study sought to investigate the trend in the volume of cash deposits by commercial banks of Kenya from the year 2012 to 2014. The results are displayed on the table below

Table 4.1: Volume of cash deposits

Years	Amount
2012	101,170.6
2013	160,789.9
2014	236,045.47

Source: Research Findings

As displayed on table 4.1 above, it was observed that the year 2014 recorded the highest number of cash deposits (236,045.47), followed by the year 2013 with cash deposits value 160,789.9 while 2012 recorded the least value of cash deposits (101,170.6). The volume of cash deposits had an increase of 59619.3 between 2012 and 2013. However a great increase (75255.57) in volume of cash deposits was observed between the year 2013 and

2014. This implies that agency banking has a great impact on volume of cash deposits in commercial banks.

4.2.2 Cash Withdrawals in the 16 Commercial Banks

The study sought to investigate the trend in cash withdrawals via agents of commercial banks of Kenya from the year 2012 to 2014. The results are displayed on the table below

Table 4.2: Cash Withdrawals

Years	Amount
2012	49,609.5
2013	73,893.5
2014	104,999.73

Source: Research Findings

From the findings it was observed that the year 2014 recorded the highest number of cash withdrawals (104,999.73), followed by the year 2013 with cash withdrawal value 73,893.5 and 2012 recorded the least value of cash withdrawals. The findings implied that the cash withdrawals increased per year due to introduction and adoption of agency banking this was confirmed by an increase of 24284 between values of 2012 to 2013. However, there was a bigger increase (31106.23) of cash withdrawals between the years 2013 to 2014 than 2012 and 2013.

4.2.3 Number of Agents

The study sought to investigate the trend in number of agents operated by commercial banks of Kenya from the year 2012 to 2014. The results are displayed on the table below

Table 4.3: Number of Agents

Years	Total
2012	16,333
2013	23,477
2014	35,847

Source: Research Findings

As observed, the number of agents has been increasing since 2012. The findings indicate that the year 2014 recorded the highest number of agents (35,847) where else the year 2012 recorded the least number of the agents (16,333). This indicates that many commercial banks are adopting the agency banking strategies hence an increase from one year to another.

4.2.3 Liquidity

Table 4.4: Descriptive Statistics on Liquidity levels

Year	Mean	Std deviation
2012	39.92	0.16
2013	38.60	0.29
2014	36.90	0.19

Source: Research Findings

The research sought to assess the levels of liquidity, from the research findings it is noted that in the year 2012 recorded the highest value in liquidity, as shown by a 39.92 percent while the years 2014 recorded the lowest value in liquidity as shown by a value of 36.90 percent

Further the values for standard deviation depict variability in liquidity during the four –year period with the highest deviation of 0.29 in the year 2013 and the lowest at 0.19 in the year 2014.

4.2.4 Number of Accounts Opened

The study sought to investigate the trend in Number of accounts opened via agents of commercial banks of Kenya from the year 2012 to 2014. The results are displayed on the table below

Table 4.5: Number of Accounts Opened

years	volume
2012	176,218
2013	158,781
2014	119,743

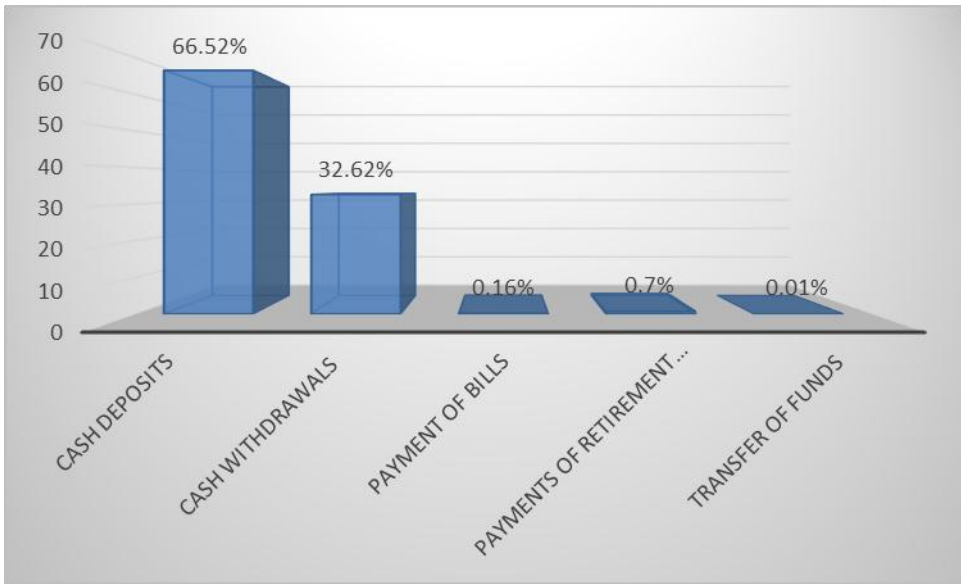
Source: Research Findings

From the findings the year 2012 recorded the highest number of the accounts opened as compared the 2013 and 2014. This indicated a slight decrease of 17437 between 2012 and 2013. However the volume of the account opened via agents recorded a higher decrease of 39038 between 2013 and 2014 financial years. This is attributed to the onetime events of opening an account in the customer life cycle. An indication that a customer can open the account only once but other transactions can be done as many times as the customers’ needs.

4.2.5 Trend in Transactions Carried out in the Year 2012

The researcher sought to investigate the various transactions carried out by bank agents in the year 2012.

Figure 4.1: Trend in Transactions Carried out in the Year 2012



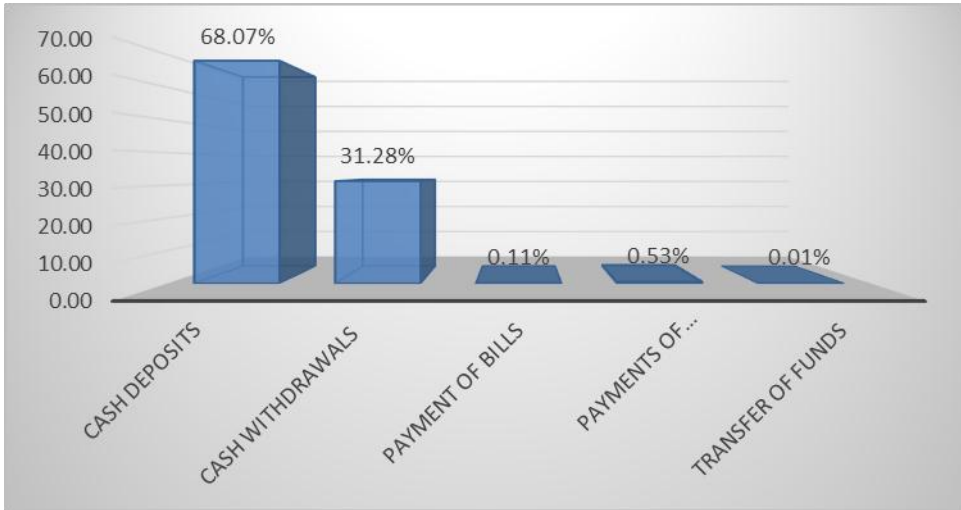
Source: Research Findings

In 2012, the most popular transaction performed by the agents was cash deposits taking up 66.52% of the total transactions for the year. This was followed with cash withdrawals at 32.62 %, payment of retirement and social benefits 0.7%, payment of bills stood at 0.16% and transfer of funds had had the least percentage of 0.01% transactions. These implied that some transactions were not so popular and accounted for small percentage of the transaction carried out for the year 2012.

4.2.6 Trend in transactions carried out in the Year 2013

The researcher sought to investigate the various transactions carried out by bank agents in the year 2013.

Figure 4.2: Trend in Transactions Carried out in the Year 2013



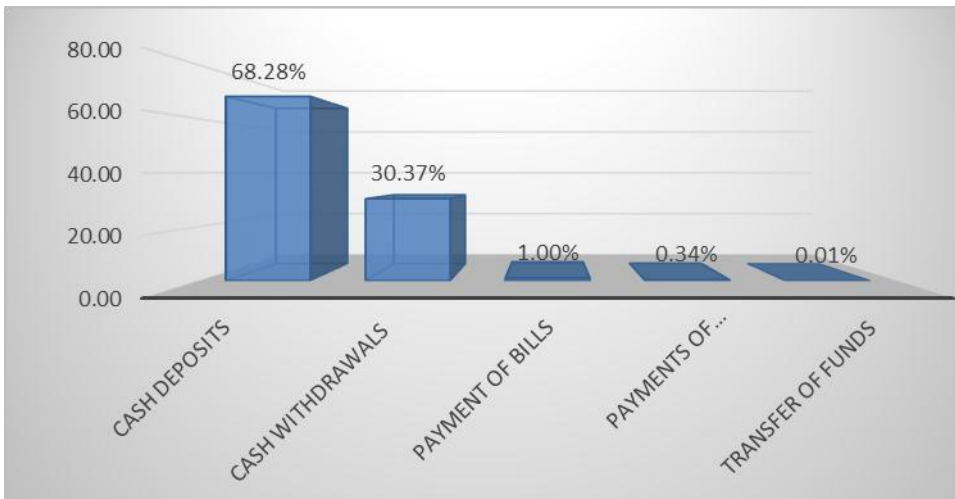
Source: Research Findings

In 2013, the most popular transaction performed by the agents was cash deposits taking up 68.07% of the total transactions for the year which was a growth of 1.55% from the previous year. This was followed by cash withdrawals at 31.28 % that presented a reduction in growth of 1.38% from the previous year. Other services like payment of retirement and social benefits, transfer of fund and Payment of bills stood were not so popular and accounted for less than 2 % of the transaction carried out for the year 2013.

4.2.7 Trend in Transactions Carried Out in the Year 2014

The researcher sought to investigate the various transactions carried out by bank agents in the year 2014.

Figure 4.3: Trend in Transactions Carried Out in the Year 2014



Source: Research Findings

In 2014, the most popular transaction performed by the agents was cash deposits taking up 68.28% of the total transactions for the year which was a growth of 0.21% from the previous year. This was followed by cash withdrawals at 30.37 % that presented a reduction in growth of 0.91% from the previous year. Other services like payment of retirement and social benefits, transfer of fund and Payment of bills stood were not so popular and accounted for less than 2 % of the transaction carried out for the year 2014.

4.3 Correlations

The Karl Pearson's product-moment correlation was used to analyse the association between the independent and the dependent variables. The Pearson product-moment correlation coefficient (or Pearson correlation coefficient for short) is a measure of the

strength of a linear association between two variables and is denoted by r . The Pearson correlation coefficient, r , can take a range of values from +1 to -1.

A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases.

Pearson's Correlation Coefficient was carried out and the results obtained are presented in table 4.5

Table 4.6: Correlations

		ROE	deposits	Withdrawals	Number of agents	Liquidity levels
ROE	Pearson Correlation	1	.789*	.655**	.511**	-.266
	Sig. (2-tailed)		.000	.002	.003	.013
	N	16	16	16	16	16
Cash deposits	Pearson Correlation	.789*	1	-.361**	-.310*	.013
	Sig. (2-tailed)	.001		.003	.028	.004
	N	16	16	16	16	16
Withdrawals	Pearson Correlation	.655**	-.340**	1	.389**	.218
	Sig. (2-tailed)	.0001	.003		.007	.015
	N	16	16	16	16	16
Number of agents	Pearson Correlation	.511**	-.410*	.399**	1	.131
	Sig. (2-tailed)	.003	.028	.007		.017
	N	16	16	16	16	16
Liquidity levels	Pearson Correlation	-.266	.012	.013	.034	1.000
	Sig. (2-tailed)	.013	.017	.021	.013	.001
	N	16	16	16	16	16

Source: Research Findings

On the correlation of the study variable, the researcher conducted a Pearson moment correlation. From the finding in the table above, the study found that there was strong correlation coefficient between ROE and volume of cash deposits as shown by correlation factor of 0.789, this strong relationship was found to be statistically significant as the significant value was 0.00 which is less than 0.05, the study also found strong positive correlation between ROE and volume of cash withdrawals as shown by correlation coefficient of 0.655, this too was also found to be significant at 0.002 level. The study also found strong positive correlation between ROE and Number of agents as shown by correlation coefficient of 0.511 at 0.003 level of confidence. It was observed that the correlation between ROE and liquidity level was negative (-0.266). As observed correlation values between the volume of cash deposits, Withdrawals, Number of agents and the dependent variable were greater than 0.05 and therefore strongly positively correlated with ROE. However, the study found negative correlation between ROE and liquidity levels as shown by correlation coefficient of (- 0.266 at 0.013) levels of confidence.

The findings concur with Atieno (2001) who found out that strong positive correlation between transaction volumes and performance of financial institutions it further concurs with Dang, (2011) who established a strong positive correlation between ICT adoption and performance of financial institutions.

4.4 Multiple Regression 2012 to 2014

This covers the outcome of the multiple regressions done for the data collected for year 2014

Table 4.7: Model Summary 2014

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643a	.413	.132	.45989

a. Predictors: (Constant), Deposits, Agents, Withdrawals and liquidity level

The regression results on the model summary can be summarized as follows; Model - SPSS allows you to specify multiple models in a single regression command. This tells you the number of the model being reported. Adjusted R-square = 0.132 as predictors are added to the model, each predictor will explain some of the variance in the dependent variable simply due to chance. One could continue to add predictors to the model which would continue to improve the ability of the predictors to explain the dependent variable, although some of this increase in R-square would be simply due to chance variation in that particular sample. The adjusted R-square attempts to yield a more honest value to estimate the R-squared for the population

R= 0.643 is the correlation between the observed and predicted values of dependent variable. R having a positive value above 0.5 indicated that all independent variables are strongly positively correlated with the dependent variable R-Square=0.413 R Square is the proportion of variance in the dependent variable ROE which can be predicted from the independent variables volume of cash withdrawal and deposit transactions done through agents; and number of agents. This value indicates that 41.3% of the variance in science scores can be predicted from the variables volume of deposits, withdrawals and number of agents. Note that this is an overall measure of the strength of association, and does not reflect the extent to which any particular Independent variable is associated with the dependent variable. This in a nut shell means the ROE can be more accurately measured if more independent variables are introduced.

Table 4.8: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	188.329	3	62.776	2.818	.0178b
1 Residual	289.501	13	22.273		
Total	477.830	16			

Critical f value= 2.109

Source: Research Findings

a. Dependent Variable: performance

b. Predictors: (Constant), Deposits, Agents, Withdrawals and liquidity level

Significance test for the Model is represented in the ANOVA table under F and Sig columns .The F-value is the Mean Square Regression divided by the Mean Square Residual. These values are used determine if the independent variables reliably predictor the dependent variable and thus the suitability of the model. From the ANOVA findings the calculated F value was greater than the tabulated value ($2.818 > 2.109$) an indication that volume of cash withdrawal and deposit transactions done through agents; and number of agents, all have a significant effects on financial performance (ROE) of commercial banks in Kenya. The significance value was less than 0.05 indicating that the model was significant.

Table 4.9: Coefficients a 2014

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.921	.241		3.822	.000
	Cash Deposits	.497	.101	.357	4.921	.000
	Cash Withdrawals	.489	.104	.376	4.702	.002
	Number of agents	.431	.128	.333	3.367	.003
	liquidity level	-.222	.063	-.219	- 3.52	.023

Source: Research Findings

a. Dependent Variable: performance

Predictors: (Constant), refers to the volume of cash deposits, number of agents and volume of cash withdrawals. Dependent Variable: Banks financial performance as measured by return on equity. From the table of coefficients above, the following regression equation for year 2014 was established.

$$Y = 0.921 + 0.497X_1 + 0.489X_2 + 0.431X_3 - 0.222X_4$$

From the regression model obtained above, Constant = 0.921, shows that if all the independent variables (volume of cash deposits, number of agents, volume of cash withdrawals and liquidity level) all rated as zero, ROE would rate 0.921. While holding the other factors constant a unit increase in volume of cash deposits led to 0.497 increase in ROE. A unit increase in Size of volume of cash withdrawals while holding the other factors constant would lead to an increase in ROE by a factor of 0.489, a unit change in number of agents while holding the other factors constant would lead to an increase of 0.431 in growth of ROE, while holding the other factors constant a unit increase in liquidity levels led to a decrease of 0.222 in return on Equity. This implied that cash deposits had the highest influence on ROE (p - value .000) however liquidity levels affected the model negatively. T Test: Tests results for significance are calculated by the SPSS and this is represented by two columns under t and Sig. These columns provide the t-value and 2 tailed p-value used in testing the null hypothesis that the coefficient $H_0: \beta_j \neq 0$ $H_0: = \beta_j 0$. The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha = 0.05$. If the probability value was less than α , then the predictor variable was significant otherwise it wasn't. As observed all the predictor variables were significant in the model as their probability values were less than $\alpha = 0.05$.

4.5 Interpretation of the Findings

From the descriptive statistics the findings indicated that the year 2014 recorded the highest number of cash withdrawals (104,999.73), followed by the year 2013 with cash withdrawal value 73,893.5 and 2012 recorded the least value of cash withdrawals. The findings implied that the cash withdrawals increased per year due to introduction and adoption of agency banking this was confirmed by an increase of 24284 between values of 2012 to 2013. However, there was a bigger increase (31106.23) of cash withdrawals between the years 2013 to 2014 than 2012 and 2013. However, it was also observed that that Volume of cash deposits had an increase of 59619.3 between 2012 and 2013 while a great increase 75255.57 in Volume of cash deposits was observed between the year 2013 and 2014. On the number of agents the findings revealed that the agents of commercial banks in Kenya increased as the years proceeded. Contrary, from the findings the year 2012 recorded the highest number of the accounts opened as compared the 2013 and 2014. This indicated a slight decrease of 17437 between 2012 and 2013 and a higher decrease of 39038 between 2013 and 2014 financial years.

On Trend in transactions carried the findings indicated that in 2012, the most popular transaction performed by the agents was cash deposits taking up 66.52% of the total transactions for the year. This was followed with cash withdrawals at 32.62 %. In 2013, the most popular transaction performed by the agents was cash deposits taking up 68.07% of the total transactions for the year which was a growth of 1.55% from the previous year 2012. This was followed by cash withdrawals at 31.28 % that presented a reduction in growth of 1.38% from the previous year. In 2014, the most popular transaction performed by the agents was cash deposits again taking up 68.28% of the total

transactions for the year which was a growth of 0.21% from the previous year. This was followed by cash withdrawals at 30.37 % that presented a reduction in growth of 0.91% from the previous year. Other services like payment of retirement and social benefits, transfer of fund and Payment of bills stood were not so popular and accounted for less than 2 % of the transaction carried out for the three consecutive financial years under study i.e. 2012, 2013 and 2014.

From the multiple regression model results $R = 0.643$ indicated that all independent variables (withdrawal and deposit transactions done through agents and number of agents) are strongly positively correlated with the dependent variable (ROE). R-Square found to be 0.413 indicated that 41.3% of the variance in science scores can be predicted from the variables volume of deposits, withdrawals and number of agents. The findings indicated that this was an overall measure of the strength of association, and does not reflect the extent to which any Independent variable are associated with the dependent variable.

From the ANOVA findings the calculated F value was greater than the tabulated value ($2.818 > 2.109$) an indication that volume of cash withdrawal and deposit transactions done through agents; and number of agents, all have a significant effects on financial performance (ROE) of commercial banks in Kenya. The significance value was less than 0.05 indicating that the model was significant.

The findings on correlation between dependent and independent variables indicated that correlation values between the volume of cash deposits, Withdrawals, Number of agents and the dependent variable were greater than 0.05 and therefore strongly positively correlated with ROE. However, the study found negative correlation between levels of

liquidity and Return on Equity (Correlation Coefficient value - 0.266, P- value 0.013). The research also established that agent liquidity needs and the sources of liquidity available to meet those needs depend significantly on the bank's business and product mix, balance sheet structure and cash flow profiles of its on- and off-balance sheet obligations. The above findings confirm with the research findings by Tianwei & Paul (2006) who found that liquidity risk management significantly led to financial performance of agricultural firms.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the study findings, conclusion and recommendations. The chapter is presented in line with the objective of the study which was to establish the effect of agency banking on various performance indicators of commercial banks in Kenya.

5.2 Summary of the Findings

From the descriptive statistics the findings indicated that the year 2014 recorded the highest number of cash withdrawals, volume of deposits and the number of agents compared to 2013 and 2012. On accounts opening via agents, the findings indicated otherwise i.e. the year 2012 recorded the highest number of the accounts opened as compared the 2013 and 2014. This indicated a slight decrease of 17437 between 2012 and 2013 and a higher decrease of 39038 between 2013 and 2014 financial years. This is attributed to the onetime events of opening an account in the customer life cycle. An indication that a customer can open the account only once but other transactions can be done as many times as the customers' needs. On trend in transactions carried the findings indicated that in 2012, 2013 and 2014 the most popular transactions performed by the agents were cash deposits and cash withdrawals. Other services like payment of retirement and social benefits, transfer of fund and Payment of bills stood were not so popular and accounted for less than 2 % of the transaction carried out for the three consecutive financial years under study i.e. 2012, 2013 and 2014.

The findings on correlation between dependent and independent variables indicated that correlation values between the volume of cash deposits, Withdrawals, Number of agents and the dependent variable were greater than 0.05 and therefore strongly positively correlated with ROE. However, the study found negative correlation between high levels of liquidity and Return on Equity (Correlation Coefficient value - 0.266, P- value 0.013).

From the multiple regression model results $R = 0.643$ indicated that all independent variables (withdrawal and deposit transactions done through agents and number of agents) are strongly positively correlated with the dependent variable (ROE). R-Square found to be 0.413 indicated that 41.3% of the variance in science scores can be predicted from the variables volume of deposits, withdrawals and number of agents. The findings indicated that this was an overall measure of the strength of association, and does not reflect the extent to which any Independent variable are associated with the dependent variable. From the ANOVA findings the calculated F value was greater than the tabulated value ($2.818 > 2.109$) an indication that volume of cash withdrawal and deposit transactions done through agents; and number of agents, all have a significant effects on financial performance (ROE) of commercial banks in Kenya. The significance value was less than 0.05 indicating that the model was significant.

5.3 Discussion of the Findings

An agent network is fundamentally a technology play for a bank. It is similar to the millions of existing Visa, MasterCard and debit card merchants, except that in this case the card payments at retail stores would not only be for sale of goods but also for handing out and taking in cash on behalf of banks. (Ignacio et al, 2008). The introduction of agent banking is intended to enable institutions to provide banking services more cost

effectively to customers. It is expected that this initiative will enhance financial access for those people who are currently unbanked or under banked (CBK, 2014).

The current study shed light on the activities carried out by the agents on behalf of the banks such as cash deposits, cash withdrawals in 2012, 2013 and 2014. While in 2013 and 2014 there was a slight shift of the activities with account opening having drastically reduced. This is attributed to the onetime events of opening an account in the customer life cycle. A customer can open the account only once but other transactions can be done as many times as the customers' needs. It is also evident in the summary of the volume of transactions that the growth in this sector more than doubled. This is a sign that the customers are taking this model positively and it has greater benefits to the customer in comparison to the bank. The customer has the banking services at their door step and this translates to less time spent on the road to the banks, convenience in deposits or withdrawals, less waiting time in queues among other benefits.

ROE which was used as measure of the financial performance in the current study is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2014) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders'

funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital. A significant increase in volume of cash withdrawal and deposit transactions done through agents and number of agents signified high return on equity in all commercial banks studied as observed in the regression results.

5.4 Conclusions

Agency banking has experienced tremendous growth and complexity of the transactions been handled. However this new services including payment of retirement and social benefits, transfer of fund and Payment of bills have not fully taken shape and account for a very small percentage of all agent activities at less than 2 percent in all the years studied. According the data obtained from CBK the nature of transactions performed by agents revealed that most of the agents are not knowledgeable of other operations that the banks can offer. This is evident by the kind of transactions the CBK has allowed banks to engage agents in and what the agents are doing. Based on this data agents are not allowed to process bank loans on behalf of the banks. This leaves a huge gap in that the much needed services require the customer to go to the branches. Loans are a key revenue earner for commercial bank and the absence of this in the portfolio of the agents means they miss out on influencing the banks financial performance.

The study carried out shed light on the fact that the number of agents operated by a commercial banks and the resultant volume of transactions (Deposits and withdrawals) are strongly correlated with the banks financial performance as measured by the return on equity. This is further supported by the fact that the R value for 2014 considerably large indicating a correlation between the predictors and the

independent variables as highlighted in the regression analysis models. This is supported by the outcome on the resulting equation where the coefficients of the predictor variables are considerably high.

Agency banking requires commercial banks to rely to on the existing infrastructure in terms of supermarkets, credit unions, hotels and petrol stations reach out to customers. Based on the findings input of agency banking into the profits is minimal though the financial institutions are vowing to intensify recruitment of more third parties to assist in expanding their market share and foot print. Kenyan financial institutions have embarked on an aggressive entry into the agency Banking segment but many are finding that agents lack capacity to handle large transactions of cash and under-spend on security measures. The concentration of most agents is also on the so called lower end market areas where most individuals operate informal business and deal with small values of money. This may contribute the huge number of transactions but does not necessarily translate to greater value.

5.5 Limitations of the Study

There were various limitations encountered that may have affected the findings of this study. For instance, the study relied on secondary data sources. Secondary data can, however, be unreliable as they were intended for other purposes. To mitigate this, the study sought to use data from an independent source and regulator; the central bank of Kenya. Further, the performance of commercial banks is influenced by other factors other than bank agents. Thus, establishing the relationship between the two variables might not provide correct information. The study tested the significance of the relationship established to curb this.

5.6 Recommendations

Based on the findings the kind of service offered by the agents has been limited to simple transactions and supportive functions like deposits and withdrawals. It is therefore recommended that banks should allow agents to perform core activities like vetting loan applications and collecting loan repayment, it is recommended that the banks transfer the basic knowledge to the agents to enable them perform these extra activities. Measures to secure the agents should also be taken by the banks to empower the agents transact greater volumes and value. The risk to the agent is too high and most will shy away from been key dealers due to insecurity therefore that study recommends that the banks should assist agents overcome this challenge to ensure greater penetration in areas that would otherwise be deemed insecure to operate from. The study also recommends that the banks need to advertise the other kinds of service that can be done via agency banking to ensure an uptake of all services offered by agents who will be more efficient and cost effective.

The study found that agency banking increases the number of transactions made by customers. This helps to improve the financial performance of commercial banks. To improve the adoption of agency banking, commercial banks in Kenya should improve customer's perception by making more advertisements and increase promotion activities.

5.6.1 Recommended areas of Further Research

The current study investigates the effect of agency banking on various performance indicators of commercial banks in Kenya. It is recommended that a study should be undertaken to determine the challenges that the agents face in carrying out the agency functions and ways or areas of improvement that the regulator, banks and agents have to ensure greater penetration and greater financial inclusion.

REFERENCES

- Aduda, J., Kiragu, D. & Ndwiga, J. (2013). The relationship between agency banking and financial performance of commercial banks in Kenya. *Journal of Finance and Investment Analysis*, 2(4), 97-117.
- Al-Tamimi, H. & Hassan, A. (2010). Factors influencing performance of the UAE Islamic and conventional national banks. *Global Journal of Business Research*, 2(4), 1-9.
- Athanasoglou, P.P., Sophocles, N.B., & Matthaios, D.D. (2005). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Working paper, Bank of Greece*. 1(1), 3-4.
- Atieno, R. (2001). *Formal and Informal Institutions, Lending Policies and Access to Credit by Small Scale Enterprises in Kenya*. An Empirical Assessment AERC Research Paper
- Ayuma, D. & Mugambi, F. (2013). The role of agency banking in enhancing financial sector deepening in emerging markets: lessons from the Kenyan experience. *European Journal of Business Management*, 5(21).
- Bold, C. (2011). Branchless banking in South Africa. *Consultative Group to Assist the Poor*. (CGAP). 28,201.
- Bora, A. & Bulut, C. (2008). Financial performance impacts of corporate entrepreneurship in emerging markets: A Case of Turkey. *European Journal of Economics, Finance and Administrative Sciences* (12).
- CBK, (2014). *Bank Supervision Annual Reports*.
- Dang, U. (2011). The CAMEL rating system in banking supervision: A case study. Arcada University of Applied Sciences, *International Business*.

- Gardner, M., Mills, D. & Cooperman, E. (2005). *Managing financial institutions*, 5th Edition.
- Gardner, M.J, (2000). *Managing financial institutions, An assets liability approach* (4thEd.) Malasya, Asia.
- Githemo, M. (2014). *The effect of agency banking on financial performance of small & medium sized enterprises in Nairobi County*. Unpublished MBA Project, University of Nairobi.
- Ivatury, G., & Ignacio, M. (2008). The Early Experience with Branchless Banking. *Focus Note 46*. Washington, D.C.: CGAP.
- Jacob, K. (2006). *Retailers as Financial Service Providers: The Potential and Pitfalls of this Burgeoning Distribution Channel*. An initiative of Shorebank advisory services. The Center for Financial Innovation.
- Jensen, C. & William, H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kamau, J. N., (2012). *The relationship between agency banking and financial performance of commercial banks in Kenya*. Unpublished MBA Project, University of Nairobi.
- Karlan, D. & Morduch, J. (2009). *Handbook of Development Economics*, Volume 5. Access to Finance.
- Kitaka, P. (2001). *A survey of the use of financial performance indicators by micro Finance institutions in Kenya*, Unpublished MBA Research Project, University of Nairobi.

- Kumar, A., Nair, A., Parsons, A. & Urdapilleta, E. (2006). Expanding bank Outreach through retail partnerships: correspondent banking in Brazil. *World Bank Working paper* No.85.
- Lyman, T.(2006). Use of agents in branchless banking for the poor: Rewards, Risks and Regulation. *Focus note* 38.Washington,D.C.: CGAP.
- Mitnick, M. (1973). *Fiduciary rationality and public policy: The theory of agency and some consequences*. Paper presented at the 1973 Annual Meeting of the American Political Science Association, New Orleans, LA. In Proceedings of the APSA, 1973 (formerly available from Xerox University Microfilms and, later, UMI Serials).
- Mustafa, K. (2009). Product positioning strategy in marketing management. *Journal of Naval Science and Engineering*, 5 (2), 98-110 .Turkey.
- Mwangi, R.W. (2011). *The effect of agency banking on financial performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).
- Ndirangu, D. (2013). *The effect of agency banking on financial performance of commercial banks in Kenya*. MBA Project, University of Nairobi.
- Ngigi, G. (2015, February 11). *Agency banking transactions hit Sh320bn mark*. Business Daily Africa, <http://www.businessdailyafrica.com/Agency-banking-transactions-hit-Sh320bn-mark/-/539552/2620776/-/r6vsi6z/-/index.html>
- Ogetange, Z. (2013). *The effect of agency banking on financial performance of commercial banks in Kenya*. MBA Project, University of Nairobi.
- Ongore, V, Kusa, G. (2013). Determinants of financial performance of commercial banks in Kenya-*International Journal of Economics and Financial Issues*, 3(1), 237-252

- Owens, J. (2006). RBAP Text-A-Payment and G-Cash Cash-In/Cash-Out Services: Innovative Banking Services
- Podpiera, J. (2008). Emerging banking market experience, *Journal of Financial Stability*
- Porter, M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York, USA: Free Press.
- Sangmi, M., Tabassum, N. (2010). Analyzing Financial Performance of Commercial Banks in India: Application of CAMEL Model. *Pakistan Journal Commercial Social Sciences*
- Sidiek, H. (2008). *Extending Financial Services with Banking Agents, Brief*. Washington, D.C. CGAP.
- Trout, R. A. (1981). *Positioning, The Battle for Your Mind*. New York:Warner Books–McGraw-hill Inc.
- Waithanji, M. (2012). *Effect of agent banking as a financial deepening initiative in Kenya*. Unpublished MBA Project, University of Nairobi.

APPENDICES

Appendix 1: Commercial Banks Registered In Kenya as at 30th December 2014

- 1 Housing Finance Company Ltd
- 2 Kenya Commercial Bank Ltd
- 3 Standard Chartered Bank Ltd
- 4 CFC Stanbic Ltd
- 5 Equity Bank Ltd
- 6 Cooperative Bank of Kenya Ltd
- 7 Barclays Bank of Kenya Ltd
- 8 Commercial Bank of Africa Ltd
- 9 Development Bank Ltd
- 10 I&M Bank Ltd
- 11 Chase Bank Ltd
- 12 Consolidated Bank Ltd
- 13 Family Bank Ltd
- 14 National Bank of Kenya Ltd
- 15 Bank of Africa Ltd
- 16 NIC Bank Ltd
- 17 Jamii Bora Bank Ltd
- 18 Fidelity Bank Ltd
- 19 African Banking Corporation Ltd
- 20 Gulf African Bank Ltd
- 21 Ecobank Ltd
- 22 Trans-National Bank Ltd
- 23 Imperial Bank Ltd
- 24 Diamond Trust Bank of Kenya Ltd
- 25 Prime Bank Ltd
- 26 Bank of Baroda Ltd
- 27 Guardian Bank Ltd
- 28 Giro Commercial Bank Ltd

- 29 Paramount Universal Bank Ltd
- 30 Bank of India
- 31 First Community Bank Ltd
- 32 Equatorial Commercial Bank Ltd
- 33 Middle East Bank Ltd
- 34 Victoria Commercial Bank Ltd
- 35 Oriental Commercial Bank Ltd
- 36 Dubai Bank Ltd
- 37 Charterhouse Bank Ltd
- 38 Citibank N.A.
- 39 Credit Bank Ltd
- 40 Guaranty Trust Bank Ltd
- 41 Habib Bank A.G. Zurich
- 42 Habib Bank Ltd
- 43 K-Rep Bank Ltd
- 44 UBA Bank of Kenya Ltd

Source: CBK Supervision report 2014

**Appendix II: Commercial Banks Adopting Agency Banking In Kenya as At 30th
December 2014**

1. Family Bank Ltd
2. NIC Bank Ltd
3. Post Bank Ltd
4. Citi Bank Ltd
5. Consolidated Bank
6. Jamii Bora
7. National Bank of Kenya
8. First Community Bank
9. Kenya Commercial Bank
10. Co-operative Bank of Kenya Ltd
11. Chase Bank (K) Ltd
12. Diamond Trust Bank Kenya Ltd
13. Equity Bank Ltd
14. K-rep Bank Ltd
15. Africa Banking Corporation (ABC)
16. Guaranty Trust (GT) Bank

Source: CBK Supervision Report 2014