THE EFFECT OF AGENCY BANKING ON PROFITABILITY OF COMMERCIAL BANKS IN KENYA

BY

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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 2016

DECLARATION

This research project is my original work and has not been presented for a degree at any other university for examination.

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

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ACKNOWLEDGEMENTS

It gives me great pleasure to acknowledge the support I received from my supervisor Mr. Gichana Jay Murray, in the various stages culminating to this final research project. His words of wisdom and advice led to the completion of this report.

I also acknowledge my brother for their immense help and encouragement. I also acknowledge the moral support from my friends for their relenting support and cooperation for enabling me gain more than I had expected. I am grateful to them all.

DEDICATION

This project is dedicated to my parents Mr. & Mrs. Isaiah Ndambuki and my brothersBrain and Kevin for their encouragement and support. May God bless the abundantly

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ATM - Automatic Teller Machine

CBK - Central Bank of Kenya

CGAP - Consultative Group to Assist the Poor

ICT - Information Communication technology

KCB - Kenya Commercial Bank

ROA - Return on Assets

ABSTRACT

Competition amongst the commercial banks has pushed banks towards becoming more innovative. These innovations include ATMs, credit cards, mobile banking, internet banking, and children accounts and now most recently introduced within banking sector – agency banking. Agency banking in the economies that are developing technologically has increasingly became an avenue for ensuring efficient and quick access to banking services, with the bank agents helping bank institutions divert customers from crowded bank halls. The agents do this by through conveniently providing these customers with services that traditionally used to be accessed at the banks only. Nonetheless, the banking agency model has yetaided alleviate the congestion in banks because clients and total transactions as wellhave grown in numbers. This research study targets to conduct an investigation on the impact that agency banking has on profitability of the commercial banking institutions in Kenya. The study employed a descriptive research design. The study population in this study constituted 43 commercial banks in Kenya as indicated in the Central Bank of Kenya Website.The study used a sample of 12 commercial banks in Kenya. The sample was purposely selected to represent commercial banks that adopted Agency banking in 2011 when the Central Bank of Kenya introduced the agency-banking model. This study used secondary data which covered a period of 5 years from 2011-2015. The Pearson correlation coefficient and the multiple linear regression were applied in order to analyze data for the study using SPSS. The study found that the number of agents has a minor significance in the positive direction in relation to profitability and the volume of deposits related significantly negative with profitability of commercial banking institutions in Kenya. The study also found that the volume of withdrawals and volume of bill of payments had an insignificant negative relationship with the profitability in the studied institutions. The study concluded that an increase in the number of agents increases the profitability and a decrease in volume of deposits, withdrawal and bills payments negatively affects the profitability of commercial banking institutions. The study recommended that commercial banks in Kenya should invest more resources towards increasing their number of agents to increase their profitability and develop deposit mobilization strategies through agency banking to ensure that their clients use agency-banking services.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Competition amongst the commercial banks has pushed banks towards becoming more innovative. These innovations include ATMs, credit cards, mobile banking, internet banking, and children accounts and now most recently introduced within banking sector – agency banking (King'ang'ai et al., 2016). This banking model has become significantly crucial in enhancing access to banking services in technologically growing economies across the world. The rapid growth in ICT in economically developing nations, more so in the African continent, has been fundamentally useful in the triggering of innovative undertakings and the agency banking is one good example of such innovations (Barasa&Mwirigi, 2013). A paper by Rosen (2013) explored the use of mobile banking and agent banking and concluded that alternative delivery channels can work as a bridge between the institutions and the excluded, given that the right kind of financial tools are provided in order for opportunities to be created through financial inclusion.

In the firm theory, economists argue that firms seek to maximize profits. For this reason, maximizing total profits is the primary objective of the representative firm in the long run. The best way this goal can be effectively attained is maximizing profits periodically, essentially because certain decisions made at a given financial period will not necessarily affect other financial periods for the firm (Coban, 2014). For commercial banking institutions, the net profits generated in a given financial period is heavily depended on number of income generating functions by the bank and its agents and the related costs for generating the profits. Due to severe competitiveness in the industry of banking, many

banks have resulted to diversifying their services with an aim of ensuring they have many income generating activities, importantly through a diversification of non-intermediation activities generating income as opposed to the intermediation activities that have traditionally been used for years by banks (Gichungu&Oloko, 2015). Therefore, agency banking is increasingly being recognized as a seriously viable method in many nations through which banks can extent their financial services to more customers especially those in remote areas (Alliance for Financial Inclusion, 2012).

The Kenyan commercial banks are taken the initiative to diversify from the traditional way of banking to target low-income people, centrally to the notion that has been previously been dominant in the banking sector in the country that banking is for the wealthy class (Rosen, 2013). In an effort to meet the increasing demand for timely and efficient service provision to their customers, the commercial banking industry across the Kenyan nation has for the last one decade been aggressive in innovating the way they serve their customer (Muiruri&Ngari, 2014). Agency banking comes in as one of the best ways the banks are achieving to diversify their services and make banking more efficient. Most of the banks across the country undertake to train their agents before mandating them with the responsibility of serving their customers outside the banking halls on behalf of the banks (Masila, Chepkulei&Shibairo, 2015). So far, in Kenya, Equity bank (Equity mashinani) post bank (Benkiyangu), Co-operative bank (Coop Kwajirani) and Kenya commercial bank (KCB mtaani) have launched forays into the segment (Musau&Jagongo, 2015).

1.1.1 Agency Banking

Agency banking is a category in banking that is branchless where third parties are used by the bank in performing some of the activities that are traditionally performed in banking halls by bank personnel (King'ang'ai et al., 2016). In a research conducted by the Central Bank in Nigeria (2013), agency banking is described as the provision of the authority by bank to a third party so that he or she can serve the bank customers on its behalf. In addition, agent banking can also be described as the use of a third-party agent licensed by the particular bank or any other prudentially regulated financial firm to provide banking services to its customerson its behalf (Oxford Policy Management Ltd, 2011).Ndungu& Wako (2015) describe agency banking as the use of third party licensed agents to provide the bank's customers with certain services on behalf of the bank

Also known by the term correspondent banking, agency banking is a model that allows the delivery of financial services to bank customers located in areas where banks may be uneconomical running a branch. This model as Rezwan&Sandip (2015) outline holds great potential in revolutionizing the banking industry and significantly help close the delivery gap. To be in a position to offer the services, banks provide the agents with reader devices at point of sale, bank agent, and a barcode scanner necessary for scanning bills paid through them. Clients accessing the services from an agent make use of the banking agent provided to them by the bank to enable them have access to their bank accounts or electronic wallet respectively (Njogu&Wanyoike, 2014). Agent banks provide regular banking functions such as deposit taking and withdrawals, disbursing and also repayment of loans, payments of salaries, payouts of pensions, transfer of funds as

well as issuing of mini statements through an infrastructures of a shared nature (Mosoti&Mwaura 2014).

Agency banking as a strategy of expansion depicts its concept from the branchless banking model into which the wordings are will use interchangeably. Agency banking also assists decongesting banking halls by letting the customers receive banking services elsewhere (King'ang'ai et al., 2016). Agency banking makes it possible for customer of the bank to have access to the banking services within reach and at the very comfort of the neighborhood. Agency banking has dramatically led to significant reduction in the total costs that go with financial services delivery especially to people in grassroots where it's hard to run bank branches profitably (Kingori&Gekara, 2015). The agency gives customers a chance for ease accessibility of financial products and related services at a places that are proximal and within reach by the customer. Such an opportunity eliminates barriers such as accessibility and timeliness of service delivery (Mutie, Bichanga&Mosoti, 2015).

1.1.2 Profitability

Profitability refers to the net income generated by corporations from gross revenues once the costs incurred have been deducted (Al-Jafari& Al Samman, 2012). Generally, profitability is described as the relationship between the profits that an organization generated and the resources that the enterprise had to invest to achieve the said profits. Profitability ratios are used to measure how efficient the corporation is in converting resources invested into profits (Alshatti, 2015).As such, the amount of money engendered by a firm over a given financial period by use of the resources at its disposal is its

profitability, whereas the market capitalization by a firm to book value of assets of the company ratio describes the market values. Ultimately, to maximize profits and grow the market value is the goal any firm Mule, Mukras&Nzioka, 2015). By so doing, the enterprise achieves to maximize shareholder value through increased value of stock (Al-Jafari&Al Samman, 2012).

Primarily, profitability helps a firm determine its success overall (Nishanthini&Nimalathasan, 2016).When a banking sector is stable and profitable, it is easy for it to withstand any negative shocks in the market, which is a good parameter in ensuring that such a banking sector contributes to the overall financial system's stability(Ani et al., 2012). Profitability is not only the most crucial indicator, but it is also the silent feature and also significant item of discussion for any experienced business entity (Tariq et al., 2014). From the perspective of the firm, higher ratio of profitability by large helps reduce the bank fragility while at the lower macro scale level, such an improved profitability makes the banking sector sustainable that can sufficiently finance activities geared toward economic development (Osuagwu, 2014).

Profitability ratios measure the ability of the firm to use the resources it has to generate profits. Moreover, profitability is verycentral investment in regard to investment security analysis to guide shareholders and investors (Nishanthini&Nimalathasan, 2016). They are important ratios in the revelation ofwhat abilities the firm has in regard to earning satisfactory revenues and return on investment. They are ratios that indicate how healthy a firm is financially, and as such an indication how well the firm makes use of its assets (Lesakova, 2007). The Return on Assets (ROA) is used by financial analysts to determine ability of the firm to generate profit from its productive operations that it involves in

(Burja, 2011). The ratio of net income to total assets shows the (ROA) when the interest and taxes have been deducted. Overall, he ratio is used to indicate the level of efficiency with which a firm's management has utilized its productive resources toward income generation (Lesakova, 2007).

1.1.3 Agency Banking and Profitability

Many developing nations have seen the agency banking model enhance economic performance and also in the increasing the performance of banking agents (Kingori&Gekara, 2015).Veniard (2010) outlines that compared to operating a bank bramnch, agency banking systems are cheaper up to three times to operate. Fixed costs are significantly reduced as there is a lot of leveraging on the existing retails outlets, an opportunity that eliminates the need for banks to fund creation of infrastructure to have the businesses running. There is also the dimension of increased revenues as bank agents are able to facilitate bill payments and person-to-person transactions that earn the bank some revenue in the end. Despite the fact that customers can as well access all these services from their respective banks, the agents enhance proximity, efficiency, and timely access as at the agent points there are no long (Veniard, 2010).

As Ndungu and Wako(2015) explains, agency banking was seen to have given another revenue generating avenue to the banks through the deposits and withdrawals by customers, which ultimately increase the profitability of the banks. Studying on how agency banking contributes to financial performance of banks, Njagi (2013) found that aspects such as low costs for the transactions, banks regulation of the agents, and quick access to financial services impacted positively on the performance of the banks on the

financial dimension across the Kenyan nation. In another study on the role agency banking serves in in enhancing the deepening of financial sector in upcoming markets by Barasa and Mwirigi (2013) found that agency banking has played a pivotal role in enhancing the penetration of banking services in unbanked markets hence enhancing financial sector deepening in Kenya.

A study by Kambua (2015) examined the effect of agency banking the performanceof banks financially in Kenya. The study found that there was a positive connection between cash deposits, volume of deposits, volume of withdraws and financial performance. Kabira (2013) also studied the effect of agency banking on the performance of commercial banks with the results indicating that there is no direct correlation between the number of agents that commercial banks operate and the volume of transactions. Mimano (2014) also studied agency banking in Kenya with a view to determining its effect on the Kenya's commercial banks'profits growth and concluded that agency banking has resulted in greater uptake of financial services, which has resulted in more revenues for the banks.

1.1.4 Commercial Banks in Kenya

Kenyan Banking Industry has the commercial banking institutions taking a dominant function in the operations of the industry. The banks get licensing as well as regulation under the guidelines of the nation's Banking Act, Regulations, and Prudential Provisions given there under. During this study, a total of 43 banks with commercial licensing exist in the country together with a mortgage financing corporation(CBK, 2016). This sector has for years been significantly important in the development and growth of the Kenya

economy. In the range of its operations and undertakings, the sector doesimplement and also formulate reforms to help growth of the economy. Any technological transformations to this sector has an undisputed impact on any nation(Muiruri&Ngari, 2014). As such, over the last ten years, a lot of dynamism has been witnessed in the Kenyan banking sector. From a stable and non-volatile environment that used to exist in the country, currently the banking sector in Kenya is quite volatile and with a lot of unpredictability, and where competition is stiff for all firms in the market (Musau&Jagongo, 2015).

Commercial banks in Kenya adopted Agent Banking services to increase the usage of banking services as an objective to financial inclusion but also minimize the queues in the banking lobbies by the customers (Mosoti&Mwaura, 2014). A the Prudential Guideline on Agent Banking from the Central Bank of Kenya is the one that governs agency banking across the nation (Jaldesa, Muturi& Sumba, 2015). The agency-model was developed by the Central Bank of Kenya in 2010 to lower costs as well as increase convenience for customers (Rosen, 2013).

According to Rosen (2013), the move to integrate mobile banking in their operations by banks saw total transactions increase from 8 million in the year 2011 to 38 million just one year later. Accordingly, a study by Vutsengwa and Ngugi (2013) undertook to analyze the factors that affect the growth of agency banking in Kenya, their findings leading to the conclusion that there is need for banks to embrace proper information security system for convenience, availability, integrity, and confidentiality. Kiura (2014) assessed the challenges facing the implementation of agency banking in Kenya and and found that banks are using fully automated systems in rendering financial services in the

country. Ndung'u, Okibo and Nyanga'u (2015) also found that the factors that affect agent banking in Kenya include financial services, financial literacy and network strength that affected security of funds through compromising integrity of the system.

1.2 Research Problem

Commercial banks have quickly recognized that Agent Banking is a viable strategy for expanding formal financial services into the unbanked regions of the country such as urban, rural or the marginalized areas (Mosoti&Mwaura 2014). However, banking institutions cannot depend on the agents they train and license in cross-selling of financial products and as such increase the net customer profitability. It implies that for this model to be effective banks may need to do extra work, like promoting and marketing of the services and use of employees from their branches to cross-sell some additional financial services to agent clients (Veniard, 20101). For this reason, agents in the model lend a hand to financial institutions and help them divert customers from busy banking halls through providing complementary and conveniently allowing them the opportunity to easily access bank services. An evaluation of the progress of the model indicates that real and significant decongestion is yet to be realized, importantly because customer transactions have also increased (Ndungu& Wako, 2015)

Dating back to the years of independence, the Kenyan banking sector has progressively transformed, expanding the services it offers to the customers and also putting in place several reforms in totality aiming to increase efficiency, the stability, access to financial resources, overall performance, and productivity. Nevertheless, the profitability for many banks has over the years been erratic (Onuonga, 2014) and over 7 million of the Kenyan

adult population living in the rural areas either are not banked or where they have been banked, cases of under banking are prominent (Kenya Bureau of Statistic Report, 2011). Despite the launching of the agency model in 2010, the model has not demonstrated significant impact in attaining what it was founded to do. In particular it is yet to demonstrategrowth effect for customers, societies and the national economics with several banks in the country yet to accept it fully (Musau&Jagongo, 2015). According to Atandi (2013), a number of financial institutions in Kenya have not well appreciated the agency banking model, with the problem becoming further complex in that the target beneficiaries not readily willing to make maximum use of it for reasons such as poor mobile network services, insufficient float in most of the agents, capital challenge, issues of insecurity and the great risk of robbery. Irura and Munjiru (2013) also argue that despite a numerous mobile and agency banking services being available, the number of customers who have willingly accepted to use them are still low.

A number of studies have explored the concept on agency banking and its influence in the banking industry. In their study, Ferdous, Mosharrafa and Farzana (2015) explored the implications that agent banking has on the enhancing customer's access and profitability of Bangladeshi commercial banks and concluded that the application of agent banking enhances customers' accessibility and profitability of banks.Chude and Izuchukwu (2014) investigated the implication agent banking has in regard to profitability across the Nigeria's banks and established that there is an important role played by agent banking in the improvement ofcustomer's satisfaction as well as the profitability for the bank. In a research study to establish the viability of branchless banking in Colombia, Mandrile& Lozano (2010) concluded that such a banking

undertaking is well acceptable to customers within the nation, and that it can be substantial impact in enhancing economic viability and growth.

A study by Masila, Chepkulei and Shibairo (2015) in Kenya, investigated the effect of agency banking on customer satisfaction in Kenya and revealed that most customers were satisfied with agency banking services but the study was on customer satisfaction not profitability. Mosoti and Mwaura (2014) revealed the queues have continued to persist while the bank agents remain unutilized in Kenya. Jaldesa, Muturi and Sumba (2015) also explored the influencing factors in relation to using banking by investors and found that that there was no significant relationship between education and use of agency banking services and awareness levels about agent banking positively influenced the use of agent banking.However, most of the studies on agency banking document the factors influencing the adoption of agency banking and its effect on its beneficiaries who are the customers and not the benefactors (commercial banks). Thus, the aim of examining: what is the effect of agency banking on profitability of commercial banks in Kenya?

1.3 Research Objective

To investigate the effect of agency banking on profitability of commercial banks in Kenya

1.4 Value of the Study

This study seeks to identify the effects of agency banking on profitability of commercial banks in Kenya. Therefore, the study will be of benefit to the management of commercial banks in Kenya who may use the findings to establish whether agency banking influences

their profitability. The findings will also be of benefit to other financial institutions like microfinance banks since it will provide insights on the effect of agency banking.

The study will also be of importance to various policy-making organizations like the Central bank of Kenya to establish effective policies concerning agency banking. Finally, the study will be of significance to researchers and academic scholars who may use the study findings as part of their empirical evidence.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section will examine the theoretical literature review, the determinants of commercial banks profitability, the empirical literature review and then a summary of the literature review

2.2 Theoretical Literature Review

The bank led model, the non-bank led model and the bank-focused theory will be adopted as the underlying theories to explore the concept of agent banking.

2.2.1 Bank Led Model

This model is in such a way that the general arrangement of the agency can only allow a bank to act as a principle in the formation of agency banking relationship. In the model, a licensed financial institution such as a bank is involved in the delivery of financial services to its clients through a retail agent. Typically, the bank does develop products and services useful to its customers but instead of it undertaking to deliver the same products and services to the end users, it delegates the responsibility to delivery of the same to an agent (Vutsengwa&Ngugi, 2013). It is a model that allows a bank or a bank collaborating with other financial institutions to deliver banking services to their customers through leveraging on the flexible and mobile banking system. Only in cases where a financial institution such as a bank collaborates with an organization that it duly verifies does this model become viable (Yakub, Bello &Adenuga, 2013). The bank-led model closely relates to this particular study as it emphasizes on the means

through banks and others facilitate the delivery of the financial services and products they have to their customers (Mwangi, 2015). Onwe (2015) outlines that in this type of models the bank retains all the customer account detals while the non-bank agent is involved with service delivery channel. Bank-led models offer the potential for banks to substantially improve their service delivery to customers. The model utilizes a varied trade partner who is experiencedand target to reach a market that is distinct from that of the traditional banks. Moreover, in this model the bank retains the primary responsibilities of being the leader in such activities as branding, marketing, and customer relationship management (Alliance for Financial Inclusion, 2013).

The bank-led model offering customers the opportunity to transact at retail agent points, it provides a distinct alternative to traditional branch-based banking. In the model, the financial institution and which could in this case be a bank, does control manages the customer relations and only gives the agents the service delivery service only where necessary \ (Merritt, 2010). 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 functions, just like a teller in the bank would perform functions as collection of deposits and effecting withdrawals for customers (Lyman, Ivatury&Stachen, 2006).

2.2.2 Non-Bank Led Model

This a model different from the bank-led one, where parties who are not banks serve as principals in the establishment of agent banking associations. In this model, there is no bank institution but a principal who can be either a mobile phone network service

provider holds the details of the clients whereas the retails serve as point of customer access to the services provided in the agency (Vutsengwa&Ngugi, 2013). In the model, an organization duly having the approval of the central bank delivers mobile payment services to the clients (Yakub, Bello &Adenuga, 2013). Non-bank-led models include digital financial services provided by internet and telecommunications providers (Gibson, Pasini& Buckley, 2014). This model has features that identify it as a financial and also a payment product, and it does contract agents in either direct way or as intermediates, and has customer money e-money accounts maintained by the principal organization (CGAP, 2006).

In the non-bank model the bank itself never comes into picture apart from instances where it may be necessary to use the bank for safe-keeping of the surplus funds that may be in circulation in the model (Wambari, 2009). Consequently, in this model the customers do not deal with the bank at any point for the banking transactions they involve in. It is the non-bank firm such as a mobile network company operator who facilitates all the banking functions in this model (CGAP, 2006). The firm serves as the core driver of all the activities in the system, virtually from marketing to branding and management of customer accounts (Alliance for Financial Inclusion, 2013).

As mentioned earlier, the banks do not come into play in this type of agent banking. Telecommunication companies and in some cases credit card issuers are the facilitators of the transactions and banking operations here (Onwe, 2015). The customers in this model have to deal with the non-bank firms such as the mobile network service providers (Kengere, 2014). Nevertheless, the agents in this model serve just like those in the bank-led model. They involve in the taking and disbursement of cash, which in this context is

termed as loading and offloading of money in the e-money system, and which in typical business language is known as the buying and selling of cash. They achieve this by the use of handheld mobile phones or POS card readers that facilitate the recording of the transactions (CGAP, 2006).

2.2.3 Bank Focused Theory

This theory comes into place when a traditional commercial bank institution employs the use of low cost and non-traditional ways to deliver services related to banking to the customers. A myriad of examples exist, including mobile, internet, and agent banking platforms (Vutsengwa&Ngugi, 2013). To many, this model is a modest method of the conventional banking at the branches and which offers an added value to the customers. In the context of the model, the customer's primary concerns are security, service quality, reliability and efficiency of accessing the services, and also level of personalization that the model allows (Kengere, 2014).

In this theory the bank does deliver banking services and products to clients by use of new methods which may include mobile phones, the use of online banking, and the use of authorized agents. The model is only deployable by an institution that has licensing from a deposit taking firm or organization such as a bank. In the model, the bank establishes proper ways through which it can mitigate in case of risks (Yakub, Bello &Adenuga, 2013).Kambua (2014) explains that the bank-focused model has several advantages over other models such as brand visibility and more profound control on the service provision activities. From the side of the client, issues of key concern include but are not limited to

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insecurity, service quality, reliability and efficiency of accessing the services, and also level of personalization that the model allows.

2.3 Factors Determining Profitability of Commercial Banks

This section will explore bank size, risk of liquidity and capital adequacy as the key factors determining the Kenya's commercial banks profitability

2.3.1 Size of the Bank

The overall size of the banking institution is utilized for the purpose of conveying the idea that large banking institutions are well placed compared to smaller ones when it comes to the harnessing of economies of scale as they plainly will find it easy to make larger profit margins (Ani et al., 2012). In the point of view of the neoclassical theory, a larger financial institution is more likely to be profitable than a smaller financial institution. The large firms attain high levels of competencies with time and this indicates there is less room for improving from the perspective of profits generated over particular financial periods (Coban, 2014).

The large firms can benefit from competencies such as may exist in their managerial practices, product marketing, process of commercialization, larger market shares, and greater opportunities to access market fields that often need large capital rates (Dahmash, 2015). The size of the bank generally helps in capturing of the economies and also diseconomies of scale as may exist in the banking industry Athanasoglou, Delis &Staikouras, 2005).

2.3.2 Liquidity Risk

The risk of liquidity arises in the banking sector when a banking institution is unable to adjust declines in liabilities or to finance increments in its assets side of its financial balance sheet (Athanasoglou, Delis &Staikouras, 2005). The liquidity risk indicator in financial analysis is measured by the use of the bank's net of total loans to the total assets of the bank or a given percentage of the assets that constitute the loan portfolio. To this end, high liquidity ratio may signify efficient bank operations importantly as a result of the possibility to increase the income interests (Tariq et al., 2014).

The liquidity risk reflector indicates the likelihood that in the future the subject bank may fail to meet its urgent or short-term obligations. An exposure of the bank to liquidity risk is indicated by comparing the amount of loans to the deposits made in the same bank. Assets associated with liquidity do not have high rates of return. Consequently, high liquidity would be an indication of low profitability for the bank and vice versa (Adusei, 2015).

2.3.3 Capital Adequacy

In general terms, banking institutions having high capital ratios face somewhat low levels of hardships during a financial crisis that may happen in the economy as long as other determining key factors remain constant. This implies that compared to banks of small capital ratios, these high capital ratio banks make larger profits. They are able to supply all their financial needs as the y may be from time to time required by the governing institution, the central bank in this case, with the surplus amounts going to customers in form of loans (Onouonga, 2014).

Capital adequacy is an indication that the bank is able to absorb any financial risky exposers such as losses. With large capital, a bank can easily adjust to any changes in the banking industry as may be called upon by the central bank (Ani et al., 2012). As would be expected, low capital translates to low earnings and inability to adjust to changes in the industry when the central bank makes such changes. According to Athanasoglou, Delis &Staikouras, (2005), increased capital gives the bank an added advantage in that it can enhance earnings through reduced costs of distresses in the finances, which may include bankruptcy.

2.4 Empirical Literature Review

King'ang'ai et al (2016)investigated the impact that banking through agents has on performance of banks financially in East Africa's Rwandan nation using a sample of the four Rwandese commercial banks in operation as at 31st December 2015. The study findings revealed that regulating agencybanking, low transaction cost through agency banking, access of services related to banking by customers through the bank agents and growth in the overall in the market positively impact the performance of banks financially in the country. The results of the multiple linear regression model established a positive significant association the agency banking impact and the performance of commercial banking institutions in Rwanda.

Caitlin (2013) conducted a research study in Brazil with an aim to establishing if agents have an improving effect on financial inclusion. The study found that mostly in Brazil distance and accessibility is not a big challenge, with quite a large percentage of the Brazilians agreeing that they bill at agent points. The study also established that an

insignificant portion of the nation's population utilize the agency banking platform to open and also make transactions on bank accounts, as well as access credit facility. The study also revealed that majority of the users of the platform are the poor, people of low levels of education, mostly work in the nation's informal sector, and a large percent of them as being women. Finally, the study revealed that the households that are unbanked visiting an agents on regularly basis represented anopportunity missed in providing financial services to under banked Brazilian people through this agent banking.

In a research study to estimate the efficiency of 58 banks selected from across the East African region, Gwahula (2013) revealed a stiff decline in Technical efficiency, the results showing a decline from 0.81 in 2008 to only 0.56 in 2009, and thereafter an indication of increase in efficiency from the value in 2009 to 0.73 in 2011. Further, the study also established that among the East African nations namely Kenya, Tanzania, Uganda, Burundi, and Rwanda, the commercial banks as indicated by the results of this sample operate under an increasingly decreasing returns to scale. This research study work therefore concluded that improper and ineffective utilization of resources is among one of the reasons for the poor performance by commercial banks observed in the study. For this reason, the researcher recommended that the commercial banks in the region should make an effort to maximally utilize the technical resources at their disposal, which may impact them through reducing expenses relating to operations and increase the overall efficiency.

In a research study work by Hawkins (2012) to establish if agency banking had an impact toward improving financial inclusion in the South African nation. In the findings, it was concluded that although not sufficient, there was a need to address the various barriers

that hinder proper functioning of agency banking in order to improve financial inclusion. Besides, this study proposed that regulatory mechanisms should be in place to improve financial inclusion. Per the study, such mechanisms could include banking licensing, monitoring, and effective measurement of financial inclusion on a regular basis for the sector to work more efficiently.

In a desk study undertaken by the Oxford Policy Management Limited in 2011 with an aim to make most suitable recommendations in agency banking development across five countries namely Colombia, Kenya, Brazil, Peru, and India, it was concluded that there is no single model that serves best in regard to regulation of agency banking. It was recommended that based on the most critical needs in a given country, the best and most suitable needs in a country can be adopted and put in place for regulation purposes. For example, the study recommended that Nigeria agency banking sector could do better with a test-and-learn regulatory model in an effort to develop its agency banking sector.

Khamis (2016) studied the effect that agency banking strategies have on customer services in commercial banks. Referring on such aspects as reduced time in the bank hall queues, reduced service costs, and personalized banking services influence the services rendered to customers, concluding that good agency banking and customer service improvement relate strongly. Further, the study found that bank agents significantly improve the overall efficiency and customer service quality in commercial banks. As a result, the study found it necessary for banking institutions to find ways to ensure that their agents are well motivated, proposing that use of performance based bonuses could be one such ways.

Kingori and Gekara (2015) evaluated how agency banking impacts performance of bank agents business using a sample of 32 agencies in Thika municipality and collected using a questionnaire. The study also used the linear regression model to analyze the association between the agency banking and performance. The study established a head start in licensing has created concentrated monopoly in competing banks thus loss of other agents business in the process. The study also established that it is almost impossible for the agents to maintain sufficient cash as well as e-money floats as balance to allow them the opportunity to meet customer withdraw and deposit demand all the time may discourage clients from frequenting the other business. The study revealed that lack of in depth knowledge and modern skills of banking industry has affected speedy growth of the agency banking and the other business they operate.

Mutie, Bichanga andMosoti (2015) assessed the role of agency banking in increasing accessibility to banking services and helping in decongesting the banking halls in Kitui, Kenya through an analysis of the costs and benefits raised by agency banking and how these are distributed among the stakeholders. The study used descriptive survey design and a sample of 100 account holders in Equity bank in Kitui. The study findings established that agency banking had availed banking services closer to the customers leading to more accessibility hence saving the customers the transport cost. The study also found that agency banking is efficient in terms of transaction cost and time saving and most of the respondents were impressed by their performance.

Gichungu and Oloko (2015) evaluated the possibility of innovative technology having an impact in the performance of commercial institutions in the country. Their study focused on establishing the impact of mobile phone banking, ATM banking, and other platforms

currently being used by people to do banking such as online banking as well as agency banking on the performance of financial banks in Kenya using a target population of 43 Kenyan banks. By use of multiple linear regression method to analyze the data the researchers concluded that these banking platforms impacted financial performance of the sampled banks positively for a period of five years, 2009 to 2013.

MusauandJagongo (2015) researched on the how Kenyan banks utilize agency banking. By use of descriptive research study design, the researchers consensually included all the banks across the country which had taken the initiative to roll out to the agency banking. They used questionnaires for the data collection, and for the analysis employed the use of inferential descriptive statistics method. They established that aspects such as availability, regulation of the agencies, the infrastructure to support the smooth running of the agency, and security issues were of critical influence in regard to how banks viewed the agency banking platform. The study concluded that it is paramount for banks to have greater attention to security issues and also to employ proper methods in the vetting of the persons they mandate with the responsibility of becoming banking agents.

Njogu and Wanyoike (2014) conducted a research study to assess the impact of customer levels of satisfaction on the market penetration strategies used by agency banking at the Nakuru branches of the Kenyan Cooperative Bank. The study employed the use of a descriptive survey study design and a sample 400 clients having access to Cooperative bank banking agency outlets in Nauru Town, with questionnaires being used as the method of data collection. The study findings showed a strong correlation in the positive direction between the having of a running account in the bank and payment of school fees

and also in regard to service enquiries by clients, cash deposit as well as money transfer, the study concluded that customers were happy with services offered by bank agents.

2.5 Conceptual Framework

This is a representation of the relation between variables used in a particular study shown graphically. The fundamental function of the framework is to illustrate the proposed association between the variables in an easy and clear to understand way. It is shown in Figure 2.1 next

Independent variable   **Dependent variable**

Number of agents

Volume of deposits

Volume of withdrawals

Volume of bill of payments

Profitability
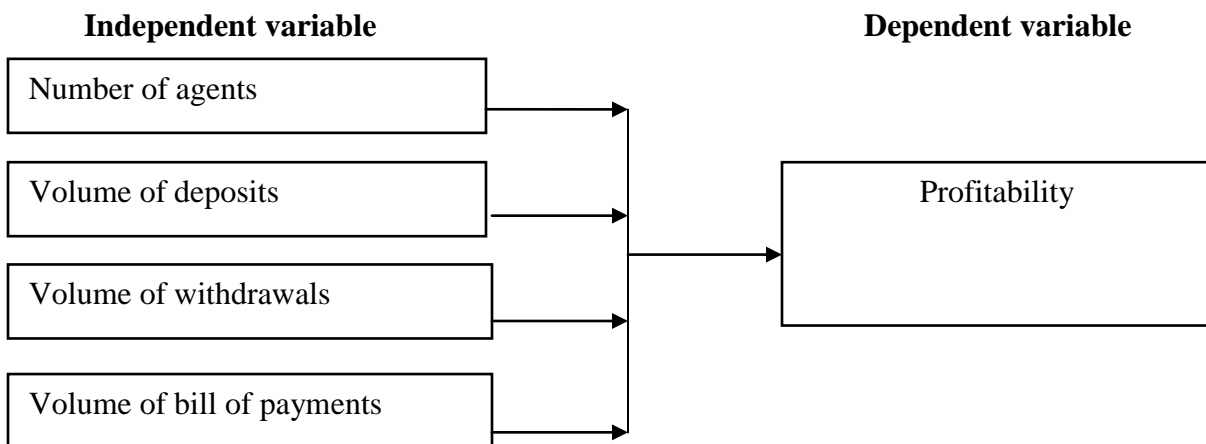
Figure 2.1: Conceptual Framework

2.6Summary of the Literature Review

The chapter has reviewed the bank led, the non-bank, and finally the bank focused theory models to explain the concept of agency banking. In addition, several studies by various scholars in various nationalities have been reviewed and most of them acknowledge agency banking is a revolutionary innovation whose main aim is financial inclusion. International studies by King'ang'ai et al (2016), Caitlin (2013), Hawkins (2012) and The Oxford Policy Management Ltd (2011) acknowledge that agency banking has enhance

accessibility of financial services in various countries in which it has been adopted but very little international studies have conclusively examined the relationship between agency banking and profitability.

Studies in Kenya by, Khamis (2016), Kingori and Gekara (2015), Mutie, Bichanga and Mosoti (2015), Gichungu and Oloko (2015) and Njogu and Wanyoike (2014), Mimano(2014) and Njagi (2013)acknowledge that agency banking increase customer satisfaction and accessibility to banking services in Kenya. However, most of the reviewed studies examine the effect of agency banking on financial inclusion and customer satisfaction. Other available studies also focus more on the challenges of agency banking and the factors that influence the performance of agency banking. Hence, a gap which this study intents to address by examining the effect of agency on profitability of commercial banks in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section presents the research design, the population of the study and the sample design. The chapter also previews the data collection procedure and the technique for data analysis.

3.2 Research Design

The design of a research study is the organization of the elementsuseful for collecting and analyzing of study data in a way that fundamentally targets to put together both the relevance and purpose aspects of the study with overall procedure of the economy (Miller & Yang, 2008). This study made use of a descriptive research design. A descriptive survey design is generally a design that aims to showin an accurate manner the traits of a particular situation, group, or even an individual (Orodho, 2005). Moreover, this kind of research design is a not an experimental research and is used across disciplines for thecollection of large amounts of data for survey from a sample representing a given population and which is sampled from that targeted population (Lavrakas, 2008).

3.3 Population of the Study

A population can be described as the total sum or number of those who conform to a predefined set of specifications (Polit and Beck, 2003). Lavrakas (2008) observes that a population can as well be thought of as any collection of individual elements that is either finitely or infinitely done. In this study, the population included of the 43 commercial banks in Kenya as indicated in the Central Bank of Kenya Website.

3.4 Sample Design

Kothari (2004) describes the design of a study sample as being a specific plan useful for the purpose of getting a representative sample from within a chosen population. A sample design the procedure or the technique a does researcher adopt in the selection of members of the population to serve as for the sample. This study used a sample of 12 commercial banks in Kenya. The sample was purposely selected to represent commercial banks that adopted Agency banking in 2011 when the Central Bank of Kenya introduced the agency-banking model

3.5 Data Collection

This study used secondary data. The secondary data on agency banking including the number of agents, the volume of deposits and withdrawals and the volume of loan repayments was obtained from the central bank annual supervision report. Data on profitability of the commercial banks was obtained from the annual published financial reports of the sampled commercial banks. The data covered a period of 5 years from 2011-2015.

3.6 Data Analysis

The Pearson correlation coefficient and the multiple linear regression statistical method was employed to analyze data for the study using SPSS. The Pearson's coefficient of correlationwas utilized to determine the nature and the degree of the relation while the multiple linear regression was used to find out the connection between the independent and dependent variables.

3.6.1 Analytical Model

The regression equation was as follows.

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where; Y = Profitability measured using Return on Assets (ROA)

X_1 = Natural log of number of agents

X_2 = Natural log of volume of deposits

X_3 = Natural log of volume of withdrawals

X_4 = Natural log of volume of bill payments

β_o = Constant

β_1 , β_2 , β_3 & β_4 = Regression coefficients

ε = Error term

3.6.2 Significance of the Test

To test the degree of significance of the regression model the study used the F –test and ANOVA (Analysis of Variance) while to determine thedegree of significance of the regression coefficients the study used the t-test. The F and t test were determined at 95% confidence level.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

The purpose of thischapter is to present analysis and the procedure for presentation of the findings of study. The chapter presents the descriptive statistics, correlation analysis, regression analysis and interpretation of the findings.

4.2 Descriptive Statistics

4.2.1 Response Rate

The study used a sample of 12 commercial banks in Kenya, which had adopted agency as from 2011 when it was launched by the central bank of Kenya. However, complete data was obtained from only 10 commercial banks thus a response rate of 83%, which was considered adequate and representative.

4.2.2 Summary Descriptive Statistics

Table 4.1 Summary Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (Ratio)	50	-.009	.117	.02480	.019735
Number of Agents (Ln)	50	8.782	10.611	9.92860	.664239
Volume of Deposits (Ln)	50	15.090	17.410	16.53050	.810544
Volume of withdrawals (Ln)	50	14.901	17.105	16.39451	.809979
Volume of bill payments (Ln)	50	10.678	12.742	11.88440	.732458

Source: Research Findings

Table 4.1 summarizes descriptive statistics. The findings on the table show that the average profitability (ROA) of the sampled commercial banks stood at 0.0248, with -0.009 being the minimum and 0.117 being the maximum ROA respectively. The results also show that on theaverage, the number of agents determined using the Natural log (Ln) is 9.929 with 8.78 being a minimum value and 10.611 the maximum value. The results further indicate that the average volume of deposits is 16.53 with maximum and minimum values of 15.09 and 17.41 whereas the average volume of withdrawals was 16.39 with minimum and maximum values of 19.901 and 17.105 respectively. The findings further indicate that the average volume of bill payments is 11.884 with 10.678 being the minim value and 12.742 being the maximum value.

4.3 Correlations

Table 4.2 Correlations

	ROA	Number of Agents	Volume of Deposits	Volume of withdrawals	Volume of bill payments
ROA	1				
Number of Agents	.162	1			
Volume of Deposits	-.355[*]	.202	1		
Volume of withdrawals	-.138	-.040	.249	1	
Volume of bill payments	-.057	.140	.014	-.144	1

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Research Findings

Table 4.2 shows the results of analysis of the correlation. The findings on the table indicate that profitability correlates positively with the agents' number. The findings also show that the volume of deposits, withdrawals and bill of payments have a negative correlation with profitability of banks in Kenya. This finding indicates that there exists a correlation of a positive nature between profitability and the number of agents but a negative correlation between profitability and volume of deposits, withdrawals and bill of payments.

4.4 Regression Analysis

Regression analysis contains the model summary, analysis of variance (ANOVA) and a summary of the regression coefficients

4.4.1 Model Summary

Table 4.3 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438[a]	.192	.120	2.408642

a. Predictors: (Constant), Volume of bill payments, Volume of Deposits, Number of Agents, Volume of withdrawals

Source: Research Findings

The findings on table 4.3 indicates that the R square value (Coefficient of determination) is 0.19.2 which indicates the the independent variables (number of agents, volume of deposits, withdrawals and bill of payments) explain only 19.2% of the variation in profitability of commercial banks in Kenya. The other 80.8% is explained by other factors outside the model and the error term.

4.4.2 ANOVA

The Analysis of Variance (ANOVA) results are shown in table 4.4 as follows

Table 4.4 ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.908	4	15.477	2.668	.044[b]
	Residual	261.070	45	5.802		
	Total	322.978	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), Volume of bill payments, Volume of Deposits, Number of Agents, Volume of withdrawals

Source: Research Findings

The findings on table 4.4 show that the regression model is significant and a fit to investigate the effect of agency banking on profitability of commercial banks in Kenya. This is shown by the P-value (Sig.) of 0.044, which is less than 0.05 at 95% confidence level.

4.5.3 Regression Coefficients

Table 4.5 Regression Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.099	5.294		1.908	.063
	Number of Agents	.232	.128	.252	1.820	.075
	Volume of Deposits	-.486	.175	-.393	-2.773	.008
	Volume of withdrawals	-.087	.279	-.044	-.311	.757
	Volume of bill payments	-.094	.138	-.093	-.681	.499

a. Dependent Variable: ROA

Source: Research Findings

From the findings on table 4.5, the following regression equation was obtained

$$Y = 10.099 + 0.232X_1 - 0.486X_2 - 0.087X_3 - 0.094X_4 + \varepsilon$$

The findings on table 4.5 indicate that the number of agents insignificantly relates positively (B=0.232) with bank's profitability. The findings also show that the volume of deposits on the negative, they significantly (B = -0.486) relate with profitability of Kenya's commercial. The study also shows that the volume of withdrawals and volume of bill of payments have an insignificant negativerelationship (B= -0.087 & 0.094) with the profitability for banks in the country.

4.5 Interpretation of the Findings

The findings of the study revealed that the number of agents positively influences the profitability of commercial banks in Kenya. This means that an increase in the number of agents increases the profitability of commercial banks in Kenya by 0.232 units since the number of agents ensures that commercial banks reach all customers. The findings also established that the volume of deposits negatively and significantly influences profitability of commercial banks in Kenya. This means that a unit decrease in volume of deposits negatively affects the profitability of commercial banks by 0.486 units since high volume of deposits provides banks with adequate funds to lend and to earn interest income.

The study revealed that the volume of withdrawals have an insignificant negative relationship with the profitability of commercial banks in Kenya. This means that a unit decrease in volume of withdrawal negatively affects the profitability of commercial banks by 0.087 units since commercial banks charge fees and commissions on withdrawals, which forms part of other incomes in the income statement. The study found that the volume of bill of payments have an insignificant negative relationship with the profitability of commercial banks in Kenya. This means that a unit decrease in volume of bill of payments negatively affects the profitability of commercial banks by 0.094 units since banks also commercial banks charge fees and commissions on bill of payments, which forms part of other incomes in the income statement.

The above finding to are similar to those of various scholars. For instance, Ndungu and Wako (2015) support that agency banking creates an additional market segment to the

banking institutions, which significantly increased the profitability as a result of the increase in deposits and also other transactions through the deepened financial inclusion. Veniard (2010) also support that agency banking brings the services more closer to the target customer, and that agency banking may further gain from further revenue that is generated from transactions that are acquired by the agent, for example the person-to-person and payment of bills. Mimano (2014) concluded that agency banking had resulted in greater uptake of financial services, which has resulted in more revenues for the banks.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary the findings of the study, the conclusion reached, the and recommendations made, limitations of the study and suggestion to guide further study on the topic.

5.2 Summary

The objective of this study was to investigate the effect of agency banking on profitability of commercial banks in Kenya. The study focused on number of agents, volume of deposits, withdrawals and bill of payments as the independent variables and profitability measured using ROA as the dependent variable. The study targeted a sample of 12 commercial banks in Kenya, which had adopted agency as from 2011 but obtained from only 10 commercial banks thus a response rate of 83%, which was considered sufficient.

The findings of the descriptive statistics established that the average profitability (ROA) of the sampled commercial banks was 0.0248 and the average number of agents determined using the Natural log (Ln) was 9.929 respectively. The findings also established that the average volume of deposits was 16.53 whereas the average volume of withdrawals was 16.39 and the average volume of bill payments was 11.884 respectively.The findings on correlationsestablished that there was a positive correlation between profitability and the number of agents but a negative correlation between profitability and volume of deposits, withdrawals and bill of payments.

The regression findings established the independent variables (number of agents, volume of deposits, withdrawals and bill of payments) explained only 19.2% of the variation in profitability of commercial banks in Kenya. The findings also established that the regression model was significant and a fit to investigate the effect of agency banking on profitability of commercial banks in Kenya. The findings found that the number of agents has an insignificant positive relationship with profitability and the volume of deposits had a significant negative relationship with profitability of commercial banks in Kenya. The study also found that the volume of withdrawals and volume of bill of payments had an insignificant negative relationshipwith the profitability of commercial banks in Kenya.

5.3 Conclusions

The study findings revealed the number of agents positively influences the profitability of commercial banks in Kenya. The study thus concludes that an increase in the number of agents increases the profitability of commercial banks in Kenya since a large number of agents ensure that commercial banks reach all customers in all areas conveniently. The study findings also established that the volume of deposits negatively and significantly influences profitability of commercial banks in Kenya. The study thus concludes that a decrease in volume of deposits negatively affects the profitability of commercial banks since deposits provides banks with adequate funds to lend and to earn interest income.

The findings also found that the volume of withdrawals have an insignificant negative relationship with the profitability of commercial banks in Kenya. The study concludes that a decrease in volume of withdrawals negatively affects the profitability of commercial banks. The study also established that the volume of bill of payments had an

insignificant negative relationship with the profitability of commercial banks in Kenya. The study concludes that a decrease in volume of bill of payments negatively affects the profitability of commercial banks.

5.4 Recommendations

The study concluded that an increase in the number of agents increases the profitability of commercial banks in Kenya. The study therefore recommends that commercial banks in Kenya should invest more resources towards increasing their number of agents to increase their profitability.

The study concluded that decrease in volume of deposits negatively affects the profitability of commercial banks. The study therefore recommends that commercial banks should develop deposit mobilization strategies through agency banking to ensure that their clients use agency-banking services.

The study concluded that a decrease in volume of withdrawals negatively affects the profitability of commercial banks. Thus, the study recommends that commercial banks should encourage their customers to withdraw money from agents so that they can earn more income in terms of fees and commissions from withdrawals

5.5 Limitations of the Study

This study used a sample of 13 banks, which have adopted agency-banking services in Kenya thus the findings are limited to the commercial banks, which use agency banking services. The study also obtained data from only 10 commercial banks, which yielded

less than 100% response rate. The findings are limited to the time period between 2011 and 2015 which was considered by the study.

5.6 Suggestions for Further Research

Agency banking is a new innovation which commercial banks in Kenya have adopted and are using it to take services to their clients at a lower cost. Banks adopt agency-banking model to enhance access to financial services by allowing independent agents to offer their services. Thus, this study recommends a further research on the effect of agency banking on financial inclusion to assess whether agency banking have enabled commercial banks reach more people especially in the rural areas.

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APPENDICES

Appendix I: List of Commercial Banks in Kenya

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Charterhouse Bank Ltd
8. Chase Bank (K) Ltd.
9. Citibank N.A Kenya
10. Commercial Bank of Africa Ltd
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd
13. Credit Bank Ltd.
14. Development Bank of Kenya Ltd
15. Diamond Trust Bank Kenya Ltd
16. Dubai Bank Kenya Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Limited
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First community Bank Limited
24. Giro Commercial Bank Ltd
25. Guardian Bank Ltd
26. Gulf African Bank Limited
27. Habib Bank A.G Zurich
28. Habib Bank Ltd
29. I & M Bank Ltd
30. Imperial Bank Ltd
31. Jamii Bora Bank Limited
32. Kenya Commercial Bank Ltd
33. K-Rep Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Limited
43. Victoria Commercial Bank Ltd

Appendix II: List of Sampled Commercial Banks

1. Chase Bank (K) Ltd.

2. Co-operative Bank of Kenya Ltd

3. Diamond Trust Bank Kenya Ltd

4. Equity Bank Ltd.

5. Family Bank Ltd.

6. First Community Bank Ltd

7. Gulf African Bank Limited

8. Post Bank Limited

9. Jamii Bora Bank Limited

10. Kenya Commercial Bank Ltd.

11. SidianBank Ltd

12. National Bank of Kenya Ltd