

# International Journal of Finance and Accounting (IJFA)

**Effect of Agency Banking Operation on Profitability of Commercial Banks: A Case Of  
Selected Commercial Banks in Nairobi County**

**David Mchembere and Jagongo A.O**

## Effect of Agency Banking Operation on Profitability of Commercial Banks: A Case Of Selected Commercial Banks in Nairobi County

\*<sup>1</sup>David Mchembere

Post Graduate Student: Kenyatta University

\*Corresponding Author's Email: [mchemberedavid@yahoo.com](mailto:mchemberedavid@yahoo.com)

<sup>2</sup>Dr. Jagongo. A.O

Lecturer: Kenyatta University

### Abstract

**Purpose:** The purpose of this study was to establish the effects of agency banking operation on profitability of commercial banks.

**Materials and methods:** The research design used for this study was descriptive design. The target population will be all eleven commercial banks offering agency banking. The study will conduct a census for all the banks. Data will be collected by use of a questionnaire and secondary data. Data will be analyzed mainly by use of descriptive and inferential statistics. Descriptive statistics will include mean and standard deviation. Data will also be presented by use of graphs, pie charts and tables. Multiple regression models will be useful to find out the virtual importance of each of the four variables.

**Results:** From the study finding agency banking branch networking is negative and a statistically insignificant factor of bank profitability. Effect of agency banking withdrawal transaction is positive and statistically significant. Agency banking deposit transactions is statistically significant. Agency banking accounts opening services is also a statistically significant factor, Commercial banks performance indicators is a statistically significant factor of bank profitability. It is possible to conclude that banks do obtain economies of scale and scope when they expand their activities, mainly by mergers and acquisitions. Therefore, expanded product array and potential for cross selling result from larger size and depth of product offering.

**Recommendations:** The study recommends that for all the commercial banks to earn more profit they ought to increase the number of customers and for their businesses to grow further they have to invest more as well as embrace the adoption of market innovative strategies. The study also recommends that the banks should emphasize on cross-selling as they can be useful marketing tools for banks to reach segments of the population that do not yet use traditional banking services.

**Key words:** *agency banking operation, profitability, commercial banks*

## 1.0 Introduction

### 1.1 Background

According to Dondo (2003), agency banking is not new in the world. It has been used very well in Latin America and Asia. There are few African countries that have taken up agency banking.

Banking agents help financial institutions to divert existing entrepreneurs from crowded branches providing a “complementary”, often more convenient channel of accessing bank services. Financial institutions, in developing markets, 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 (Kitaka, 2001). 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 (Adiera, 1995).

Banking agents are the backbone of money banking since they perform transactions over a bank device, to enable clients to convert cash into electronic money and vice versa. Money can be sent over their banking agent, clients will have to visit a branch, or banking agent. Especially in remote and rural locations, where cash is still the most important way to pay and transact, a banking service is dependent on banking agents to enable clients to effectively use the service (Podpiera, 2008). Agents became legitimate in Russia in 2009, but the Russian environment is distinctive for a scarcity of financial services, their uneven distribution across the country, and the lack of financial awareness and trust in financial institutions. Currently Russia has about 10000 agents and 500000 various types of automatic terminals, with about 1,000 of credit organizations in the country. The agent model, with non-credit organizations offering some basic bank services has major development potential for Russia’s financial services market, but industry players note system reliability and access issues need to be addressed first (Blake, 2011). Agency banking takes customers out of the bank halls to kiosks and villages. Investors have pumped billions into new platforms that offer agency banking services (Mulupi, 2011). Among the platforms are M-kesho and 24/7 from Equity bank, Tangaza and Mobikash of MobiKash Afrika Limited, Co-op Kwa jirani of Co-operative bank among others. Given that more Kenyans without bank accounts will gain access to mobile banking services, transaction fees charged to mobile banking customers have reduced. One notable feature mobile platforms share is that their agents also serve as banking agents (Mulupi, 2011).

### **1.1.2 Profitability of Commercial Banks**

The stream of bank failures experienced in the USA during the great depression of the 1940s prompted considerable attention to bank performance. The attention has grown ever since then (Heffernan, 2005). The recent global financial crisis of 2007/2009 also demonstrated the importance of banks profitability both in national and international economies and the need to keep it under surveillance at all times. The banking environment in Kenya has for the last decade undergone many regulatory and financial reforms. These reforms have brought about many structural changes in the sector and have also encouraged foreign banks to entry in market (Kamau, 2009). Oloo (2009) describes the banking sector in Kenya as the bond that holds the country together. The performance of the banking industry in Kenya has improved tremendously over the last ten years, as only two banks have been put under statutory management during this period compared to 37 banks failure between 1986 and 1998 (Mwega, 2009).

The overall profitability of the banking sector in Kenya has improved over the years, a critical analysis indicates that a profit before tax of Ksh 49.01 billion was posted by big financial

institution (CBK, 2009). The huge profitability of the banks indicates that there are some significant factors that influence the profitability of commercial banks (CBK, 2009). In regards to Agency banking, according to CBK annual supervision report (CBK, 2012), the value of transactions handled by commercial banks tripled to Ksh152 Billion last year, helping the lenders to mobilise cheap deposits while also keeping their staff costs in check. It also reveals that more bank customers are making cash deposits, withdrawals and other transactions through agents. According to CBK report dubbed Development in the Kenya Banking Sector for the Quarter ended 30 June 2013, The profit before tax of Commercial banks increased by 17.7% from Ksh28.2 billion in March 2013 quarter compared to Ksh33.2 billion for the quarter ending June 2013. Over the same period, total income stood at Ksh.92.4 billion being an increase of 8.8 % from Ksh.84.9 billion registered in the first quarter of 2013. Profitability of the banking sector is a subject that has received a lot of attention in recent years. There is now more literature which has examined the role played by management of resources in determining bank profitability. It is generally agreed that better quality management of resources is the main factor contributing to bank performance, as evidenced by numerous studies that have focused on the U.S. banking system (DeYoung and Rice, 2004; Stiroh and Rumble, 2006; Bhuyan and Williams, 2006; Hirtle and Stiroh, 2007) and the banking systems in the western and developed countries (Ho and Tripe, 2002; Williams, 2003; Pasiouras and Kosmidou, 2007; Kosmidou et al., 2007; Kosmidou and Zopounidis, 2008; Athanasoglou, 2007; Albertazzi and Gambacorta, 2008).

The traditional measures of the profitability of any business are return on assets (ROA) and return on equity (ROE). Assets is used by businesses to generate income. Loans and securities are a bank's assets and are used to provide most of a bank's income. However, to make loans and to buy securities, a bank must have money, which comes primarily from the bank's owners in the form of bank capital, from depositors, and from money that it borrows from other banks or by selling debt securities—a bank buys assets primarily with funds obtained from its liabilities as can be seen from the following classic accounting equation (Lamido, 2010). Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. However, the intention of this study is related to the first objective, profitability. To measure the profitability of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003; Alexandru et al., 2008).

## **1.2 Problem Statement**

Financial inclusion is a big challenge in Kenya: only 22.6% of the adult population has a bank account (Fin access, 2009). Agency banking takes customers out of the bank halls to kiosks and villages. Investors have pumped billions into new platforms that offer agency banking services (Mulupi, 2011). Among the platforms are M-kesho and 24/7 from Equity bank, Tangaza and Mobikash of MobiKash Afrika Limited, Co-op Kwa jirani of Co-operative bank among others. Given that more Kenyans without bank accounts will gain access to mobile banking services, transaction fees charged to mobile banking customers have reduced. One notable feature mobile platforms share is that their agents also serve as banking agents (Mulupi, 2011).



The overall profitability of the banking sector in Kenya has improved over the years, a critical analysis indicates that a profit before tax of Ksh 49.01 billion was posted by big financial institution (CBK, 2009). The huge profitability of the banks indicates that there are some significant factors that influence the profitability of commercial banks (CBK, 2009). In regards to Agency banking, according to CBK annual supervision report (CBK, 2012), the value of transactions handled by commercial banks tripled to Ksh152 Billion last year, helping the lenders to mobilise cheap deposits while also keeping their staff costs in check. It also reveals that more bank customers are making cash deposits, withdrawals and other transactions through agents. Nganga and Mwachofi (2013) investigated technology Adoption and the Banking Agency in Rural Kenya and noted that though a variety of mobile and agency banking services are on offer, only a very small proportion of customers who access it, actually use it. They recommended intervention that addresses both internal and external factors that inhibit mobile and agency banking technology adoption in rural Kenya and other similar developing countries. Wairi (2011) investigated the factors influencing the adoption of agent banking innovation among commercial banks in Kenya and concluded that Cost reduction, Enhancement of customer service and Expanded presence by banks particularly in remote areas were factors that influenced adoption of agency banking In Kenya. A lot of emphasis has been given to agency banking in the context of access to banking services while very little focus is given on the agency banking operation on profitability of commercial banks. How this model has contributed to the profitability of these banks in Kenya is yet to be documented. The purpose of this study is therefore to establish the effects of agency banking operation on profitability of commercial banks in Kenya.

### **1.3 Objectives of the study**

The general objective of the study was to establish the effects of agency banking operation on profitability of commercial banks in Kenya.

The specific objectives are as follows:

- i. To establish the effect of agency banking branch networking on profitability of commercial banks
- ii. To determine the effect of agency banking withdrawal transaction on profitability of commercial banks
- iii. To establish the effect of agency banking deposit transactions on the profitability of commercial banks
- iv. To investigate the effect of agency banking accounts opening services on the profitability of commercial banks

## **2.0 LITERATURE REVIEW**

### **2.1 Agency Theory**

Agency theory is a concept that explains why behavior or decisions vary when exhibited by members of a group. Specifically, it describes the relationship between one party called the principal, that delegates work to another called the agent. It explains their differences in behavior or decisions by noting that the two parties often have different goals and, independent of their respective goals, may have different attitudes toward risk. The concept originated from the work

of Adolf Augustus Berle and Gardiner Coit Means, who were discussing the issues of the agent and principle as early as 1932. Berle and Means explored the concepts of agency and their applications toward the development of large corporations. They saw how the interests of the directors and managers of a given firm differ from those of the owner of the firm, and used the concepts of agency and principal to explain the origins of those conflicts (Murtishaw & Sathaye, 2006).

Jensen and Meckling shaped the work of Berle and Means in the context of the risk-sharing research popular in the 1960s and '70s to develop agency theory as a formal concept. Jensen and Meckling formed a school of thought arguing that corporations are structured to minimize the costs of getting agents to follow the direction and interests of the principals. The theory essentially acknowledges that different parties involved in a given situation with the same given goal will have different motivations, and that these different motivations can manifest in divergent ways. It states that there will always be partial goal conflict among parties, efficiency is inseparable from effectiveness, and information will always be somewhat asymmetric between principal and agent. The theory has been successfully applied to myriad disciplines including accounting, economics, politics, finance, marketing, and sociology (Nikkinen & Sahlström, 2004).

## **2.2 Theory of core competencies and Outsourcing**

According to Dess (1995) and Gilley and Rasheed (2000), core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies. Since core competence is about harmonizing streams of technology, it is also about the organization of work and the delivery of value. Core competencies theory suggests activities should be performed either in house or by suppliers. Activities, which are not core competencies, should be considered for outsourcing with best-in-the-world suppliers. Some non-core activities may have to be retained in house if they are part of a defensive posture to protect competitive advantage.

Although some authors indicate characteristics of core competencies, most of the literature on this subject seems tautological – core equals key or critical or fundamental. Employees in non-core functions (even if not facing outsourcing) may feel excluded by the organization because they are a non-dominant discipline. For example, information technology employees working on web based legal services in a law firm may feel excluded by lawyers in the firm. In the public sector, there may be particular uncertainty about what is core; and it has been suggested that government may aim to discover its core competencies via a residualisation process – outsourcing until and unless the shoe pinches, or a political backlash is triggered (Hancox & Hackney, 2000)

The core premise of the resource-based view is that resources and capabilities can vary significantly across firms, and that these differences can be stable (Barney & Hesterly, 1996). If resources and capabilities of a firm are mixed and deployed in a proper way they can create competitive advantage for the firm. The resource-based view in outsourcing builds from a proposition that an organization that lacks valuable, rare, inimitable and organized resources and capabilities, shall seek for an external provider in order to overcome that weakness. Therefore the most prominent use of the theory is in the Preparation phase of the outsourcing process for

defining the decision making framework and in the vendor selection phase for selecting an appropriate vendor. The theory has been also used to explain some of the key issues of the Managing relationship and Reconsideration phases

### **2.3 Financial Inclusion Theory**

Financial inclusion refers to the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular, at an affordable cost, in a fair and transparent manner, by mainstream institutional players (Chakrabarty, 2011). An inclusive financial sector that provides 'access' to credit for all 'bankable' people and firms, to insurance for all insurable people and firms, to savings and payment services for everyone (United Nations 2006 b). Inclusive finance does not require that everyone who is eligible use each of the services, but they should be able to choose to use them if desired.

World Bank (2008) has classified financial access barriers into four main categories; physical barriers, lack of documentation barriers, affordability barriers and lack of appropriate products and services. For Geographic access, branches have been the traditional bank outlet, hence geographic distance to the nearest branch, or the density of branches relative to the population can provide a first crude indication of geographic access or lack of physical barriers to access (Beck, Demirguc-Kunt and Martinez Peria (2007). Limiting eligibility and documentation requirements is another barrier to access. For example banks in Albania, the Czech Republic, Mozambique, Spain and Sweden demand on average only one document to open a bank account, whereas banks in Tobago, Uganda and Zambia require at least four documents, including an identity card or passport, recommendation letter, wage slip and proof of domicile (Worldbank,2008). Given the high degree of informality in many developing countries, only a small proportion of the population can produce these documents.

Kempson et al (2004) reported that financial exclusion is the most prevalent amongst those on low incomes. Unemployed people living on social security payments from the state are therefore especially vulnerable, as are low income households from ethnic minority communities who may also have relatively low levels of engagement with the financial services industry. Kempson (2004) supported by evidence from the Family Resources Survey 2002-2005, report that uptake of financial products and services is lowest amongst African-Caribbean, Black, Pakistani and Bangladeshi households in the UK. However, for some members of these groups religious beliefs may provide a partial explanation for this apparent exclusion.

### **2.4 Empirical Review**

#### **2.4.1 Agency Banking Branches Networking**

An agency bank is a company/organization that acts in some capacity on behalf of another bank, it, thus, cannot accept deposits or extend loans in its own name; it acts as agent for the parent bank. It is a retail 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 (Central Bank of Kenya (CBK), 2010). The partnership has helped

banks to take financial services closer to people, more importantly, to areas that lack them. Kenya changed its banking laws in January 2010, to allow commercial banks offer their services through third-party businesses. The agents operate as satellite branches. The banking concept that is deepening access to financial services is gaining currency in Kenya, where one-third of the population still lacks access to formal banking services (Central Bank of Kenya (CBK), 2010).

#### **2.4.2 Agency Banking Withdrawal Transaction**

Most agencies banking in Kenya are also located in places where customers may perceive as “high risk” and there are issues to do with fraud, which is on the rise in the East African nation. Besides that, charges imposed on customers for using agency services have also made people avoid them. Agencies charge customers who use agents 0.94 dollars per transaction. People thus prefer to come to banks because the same services are free. Agency withdrawals charges are therefore key to banks profitability.

#### **2.4.3 Agency Banking Deposit Transactions**

Depositors are motivated by returns, it is important for banks management to understand the extent that rates of return on deposits influence their customers’ decision to deposit. The purpose of this study is to highlight the strength of the relationship between the deposits of banks, and its ‘rate of profit’ of both savings and investment deposit facilities. This study will also measure whether the rates of interest available at conventional banks have a direct influence on the level of deposits (Baxter, 2008). Rate of interest has always been featured as one of the important considerations in explaining the saving behavior of individual. Saving, according to Classical economists, is a function of the rate of interest. The higher the rate of interest, the more money will be saved, since at higher interest rates people will be more willing to forgo present consumption. Based on utility maximization, the rate of interest is also at the center of modern theories of consumer behavior, given the present value of lifetime resources. For a net saver an increase in the rate of interest will have an overall effect composed of two partial effects: an income effect leading to an increase in current consumption and a substitution effect leading to a reduction in current consumption (Ramcharan, 2009).

#### **2.4.4 Agency Banking Accounts Opening Services**

As the market place becomes more competitive and customers more likely to shop around for banking services, banks must strive to understand not just the revenue that each customer generates, but also the overall cost of selling products to that customer. However, customer value calculations can be difficult to generate because it can be hard to get an accurate measurement of cost per sale. Failing to understand how much it costs to sell a mortgage or credit card to one customer over another and how much it costs to sustain that relationship – can result in marketing to the wrong segments, losing valuable customers or even losing money on seemingly profitable customers (Selden & Colvin, 2004).

#### **2.4.5 Commercial Banks Performance Indicators**

Practically, profitability and liquidity are effective indicators of the corporate health and performance of not only the commercial banks, but all profit-oriented ventures. These performance indicators are very important to the shareholders and depositors who are major

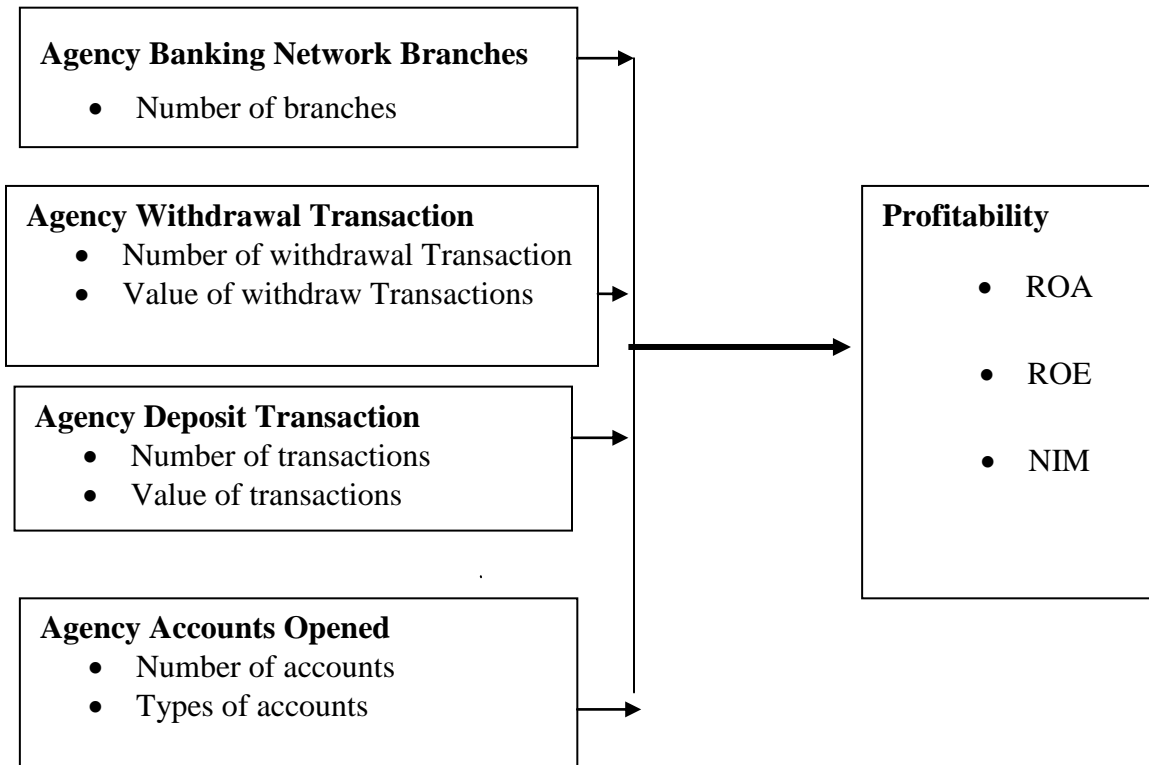


publics of a bank. As the shareholders are interested in the profitability level, the depositors are concerned with liquidity position which determines a bank's ability to respond to the withdrawal needs which are normally on demand or on a short notice as the case may be (Eljelly, 2004). The traditional measures of the profitability of any business are return on assets (ROA) and return on equity (ROE). Assets is used by businesses to generate income. Loans and securities are a bank's assets and are used to provide most of a bank's income. However, to make loans and to buy securities, a bank must have money, which comes primarily from the bank's owners in the form of bank capital, from depositors, and from money that it borrows from other banks or by selling debt securities—a bank buys assets primarily with funds obtained from its liabilities as can be seen from the following classic accounting equation (Lamido, 2010). Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. However, the intention of this study is related to the first objective, profitability. To measure the profitability of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy & Sree, 2003; Alexandru, 2008).

## **2.5 Conceptual Framework**

**Independent Variables**

**Dependent Variable**



### 3.0 RESEARCH METHODOLOGY

The study employed descriptive survey design. The population of the study was all 11 commercial banks offering agency banking. They comprised of Co-operative, KCB, Equity Bank, Chase Bank, Family Bank, CFC Stanbic bank, National bank, Post office saving Bank, Barclays Bank, Standard Chartered Bank and which had embraced the agency module. The study sample purposively comprised the eleven commercial banks which offered agency banking. The study used primary data which was collected through use of a questionnaire. Secondary data was also be utilised in the study. This means that all the study variables utilised quantitative data. The data was obtained from the annual reports of the banks and also from banks' internal sources. To compile the data, a secondary data collection template was used. Data was for year 2010 to 2012. SPSS was used to produce frequencies, descriptive (mean score) and inferential statistics (regression) which was used to derive conclusions and generalizations regarding the population.

## 4.0 FINDINGS, RESULTS AND DISCUSSION

### 4.1 Response Rate

The initial target population for the study was 82 (eighty two) respondents. 82 questionnaires were randomly distributed to operating managers in selected commercial banks. A research assistant was deployed to circulate and follow up on the questionnaires. Out of the 82 self administered questionnaire, 80 questionnaires were duly completed and returned. This converts to a response rate of 98 % as shown on Table 4.1.

**Table 1: Response Rate**

Response	Frequency	percent
Returned	80	98%
Unreturned	2	2%
<b>Total</b>	<b>82</b>	<b>100%</b>

### 4.2 Descriptive Analysis

This section is arranged based on the objectives of the study.

#### 4.2.1 Agency banking network Branches

**Table 2: Agency banking network Branches**

Statements	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std Dev
Bank branches are sufficient to provide banking services to cater for the needs of today's sophisticated and demanding customers.	0.00%	0.00%	3.80%	62.50%	33.80%	4.30	0.54
There has been an increasing number of agency banking branches over the last three years	0.00%	0.00%	12.50%	57.50%	30.00%	4.17	0.63
Our agency banks branches are more than those of its peers	0.00%	0.00%	8.80%	57.50%	33.80%	4.25	0.61
Our agency banks branches are located in both local and urban areas	0.00%	0.00%	7.50%	62.50%	30.00%	4.23	0.57

Our agency banking branches has reduced long queues in the banks	0.00%	0.00%	8.80%	58.80%	32.50%	4.24	0.60
<b>Total Average</b>						<b>4.24</b>	<b>2.95</b>

#### 4.2.2 Agency Withdrawal Transaction on Profitability

Findings in Table 3 illustrate that in relation to the number of withdrawal transaction through agency banking has increased, majority respondents (60.00%) agree with this statement, 33.80% strongly agree to this statement. Six percent (6.20%) neither agree nor disagree with the statement. On whether the value of withdrawal transaction through agency banking has increased majority of the respondents (57.50%) agree with this statement, 37.50% strongly agreed, 5.00% neither agree nor disagree with this statement. In regards to whether the number of withdrawal through agency banking are more than those of it's of peers 56.20% of the respondents agree, 37.50% strongly agree, 6.20% neither agree nor disagree with this statement. The respondents were asked if the withdraws are available to all customer both corporate and retail 57.50% agreed with the statements, 37.50% strongly agree and 5.00% of the respondents neither agree nor disagree with the statements. In relation to whether there is enough liquidity to facilitate withdrawals 62.50% of the respondents agreed with the statements while 31.20% of the respondents strongly agreed. Six point two percent of the respondents neither agree nor disagree with the statement. It was supported by a mean score of 4.30 and a standard deviation of 2.86, these shows that majority of the respondents agreed with this statements. These results imply that stakeholders play a very fundamental in organizational management.

**Table 3: Agency Withdrawal Transaction on Profitability**

Statements	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std Dev
The number of withdrawal transaction through agency banking has increased	0.00%	0.00%	6.20%	60.00%	33.80%	4.27	0.57
The value of withdrawal transaction through agency banking has increased	0.00%	0.00%	5.00%	57.50%	37.50%	4.33	0.57
The number of withdrawal through agency banking are more than those of its of peers.	0.00%	0.00%	6.20%	56.20%	37.50%	4.31	0.59
The withdraws are available to all customer both corporate and retail	0.00%	0.00%	5.00%	57.50%	37.50%	4.32	0.57



There is enough liquidity to facilitate withdrawals	0.00%	0.00%	6.20%	62.50%	31.20%	4.25	0.56
<b>Total Average</b>						<b>4.30</b>	<b>2.86</b>

#### 4.2.3 Agency Deposit Transactions on the Profitability

Results in Table 4 on agency deposit transactions on the profitability indicate that in relation to whether the number of deposit transaction through agency banking has increased majority of the respondents (57.50%) agreed with the statement, 36.20% strongly agree with the statement, 6.20% neither agree nor disagree with the same statement. On whether the value of deposit transaction through agency banking has increased majority respondents 58.80% agree, 36.20% strongly agree while 5.00% of the respondents neither agree nor disagree with the statement. Concerning the number of deposit through agency banking are more than those of it's of peers majority respondents (70.00%) agreed while 26.20% strongly agree and 3.8% neither agree nor disagree. On whether the deposit is available to all customers both corporate and retail majority 61.20% respondents agreed while 33.80% strongly agree while 5.00% of the respondents were neither agree nor disagree. Opinions of whether there is enough liquidity to facilitate deposit majority of the respondent 61.20% of the respondents agree while 32.50% of the respondent strongly agree while 6.20% neither agree nor disagree with the statement . It was supported by a mean score of 4.28 and a standard deviation of 2.77, these shows that majority of the respondents agreed with this statements. This implies that there is many customers using agency banking and it has been recognized by many people.

**Table 4: Agency Deposit Transactions on the Profitability**

Statements	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std Dev
The number of deposit transaction through agency banking has increased	0.00%	0.00%	6.20%	57.50%	36.20%	4.3	0.58
The value of deposit transaction through agency banking has increased	0.00%	0.00%	5.00%	58.80%	36.20%	4.31	0.56
The number of deposit through agency banking are more than those of its of peers	0.00%	0.00%	3.80%	70.00%	26.20%	4.23	0.5
The deposit are available to all customer both corporate and retail	0.00%	0.00%	5.00%	61.20%	33.80%	4.29	0.56
The is enough liquidity to	0.00%	0.00%	6.20%	61.20%	32.50%	4.26	0.57

facilitate deposit		
<b>Total Average</b>	<b>4.28</b>	<b>2.77</b>

#### 4.2.4 Agency Accounts Opening service on the Profitability

The Respondents in table 5 were asked to indicate whether the number of agency accounts opening has increased in the last three years majority 57.50% of the respondent agreed while 36.20% strongly agree and 6.20% neither agree nor disagree with the statement. In regards to whether their agency banks branches accounts opening are more than those of its peers 67.50% of the respondent agreed, 28.80% strongly agree and 3.80% neither agree nor disagree. On whether the Agency banking has led to an increase in accounts for women majority respondents 65.00% of the respondent agreed, 32.50% strongly agree and 2.50% neither agreed nor disagree with the statement. On whether the Agency banking has led to an increase in accounts for disabled people 56.20% agreed, 40.00% strongly agree and 3.80% neither agree nor disagree with the statement. The respondent were asked whether Agency banking has led to an increase in accounts for men majority 70.00% agreed while 27.50% strongly agree while 2.50% neither agree nor disagree with the statement. It was supported by a mean score of 4.29 and a standard deviation of 2.66, these shows that majority of the respondents agreed with this statements. These imply that agency banking has been used by every kind of people.

**Table 5: Agency Accounts Opening service on the Profitability**

Statements	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std Dev
The number of agency accounts opening has increased in the last three years	0.00%	0.00%	6.20%	57.50%	36.20%	4.3	0.58
Our agency banks branches accounts opening are more than those of its peers	0.00%	0.00%	3.80%	67.50%	28.80%	4.25	0.52
Agency banking has led to an increase in accounts for women	0.00%	0.00%	2.50%	65.00%	32.50%	4.3	0.51
Agency banking has led to an increase in accounts for disabled people	0.00%	0.00%	3.80%	56.20%	40.00%	4.36	0.56
Agency banking has led to an increase in accounts for men	0.00%	0.00%	2.50%	70.00%	27.50%	4.25	0.49
<b>Total Average</b>						<b>4.29</b>	<b>2.66</b>

#### 4.2.5 Commercial Banks Performance Indicators

The Respondents in Table 6 were asked to indicate whether the Agency banking has led to an increase in profitability majority 66.20% of the respondent agreed while 28.70% strongly agree and 5.00% neither agree nor disagree with the statement. In regards to whether Agency banking has led to an increase in those customers who access finance 65.00% of the respondent agreed, 28.80% strongly agree and 6.20% neither agree nor disagree. On whether the Agency banking has given the bank a competitive edge majority respondent 60.00% of the respondent agreed, 33.70% strongly agrees and 6% neither agreed nor disagree with the statement. On whether the Agency banking has led to an increase in shareholder return 63.80% agreed, 31.20% strongly agree and 5.00% neither agree nor disagree with the statement. The respondent were asked whether the Agency banking has led to an increase in gross revenue majority 66.20% agreed while 30.00% strongly agree while 3.80% neither agree nor disagree with the statement. It was supported by a mean score of 4.23 and a standard deviation of 2.86, these shows that majority of the respondents agreed with this statements.

**Table 6: Commercial Banks Performance Indicators**

Statements	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std Dev
Agency banking has led to an increase in profitability	0.00%	0.00%	5.00%	66.20%	28.70%	4.2	0.58
Agency banking has led to an increase in those customers who access finance	0.00%	0.00%	6.20%	65.00%	28.80%	4.23	0.55
Agency banking has given the bank a competitive edge	0.00%	0.00%	6.20%	60.00%	33.70%	4.24	0.62
Agency banking has led to an increase in shareholder return	0.00%	0.00%	5.00%	63.80%	31.20%	4.23	0.59
Agency banking has led to an increase in gross revenue	0.00%	0.00%	3.80%	66.20%	30.00%	4.26	0.52
<b>Total Average</b>						<b>4.23</b>	<b>2.86</b>

### 4.3 Inferential Statistical Analysis

#### 4.3.1 Regression Analysis

Data analysis was also done using a linear multiple regression model in the form of;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

In the model,  $\beta_0$  = the constant term while the coefficient  $\beta_i = 1 \dots 4$  was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables.  $\mu$  is the error term which captures the unexplained variations in the model.

Where Y = ROA which is the dependent variable of the study,  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  represent; agency banking network branches, agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts opening and commercial banks performance indicators which are the independent variables.

Table 7 shows the initial regression results regarding the robustness of the regression model in explaining the study phenomena. The composite correlation between the dependent and the independent variables is 0.861 which is a positive and a strong correlation. The coefficient of determination also called R square is 0.741 (74.1%). This means that the independent variables (agency banking network branches, agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts opening and commercial banks performance indicators) of the study explain 74.1% of the variations in the dependent variable (ROA) while the rest is explained by other factors or variables not captured in this current study.

**Table 7: Regression Model Fitness**

Indicator	Coefficient
R	0.861
R Square	0.741
Adjusted R Square	0.723
Std. Error of the Estimate	0.027

ANOVA statistics indicate that the overall model was significant. This was supported by an F statistic of 42.322 and p value of 0.000. The reported probability was less than the conventional probability of 0.05 (5%) significance level. The ANOVA results imply that the independent variables are good joint predictors of Return on Asset (ROA).

**Table 8: Analysis of Variance (ANOVA)**

Indicators	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.152	5	0.03	42.322	0.000
Residual	0.053	74	0.001		
Total	0.205	79			

Regression results in Table 9 indicate that there is a positive and significance relationship between return on asset (ROA) and agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts opening and commercial banks performance indicators as indicated by the beta coefficients of; 0.058, 0.041, 0.035 and 0.068 respectively. Agency banking branches network has a negative and insignificant relationship of - 0.019. The study predictor variables that were statistically significant in explaining ROA were agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts



opening and commercial banks performance indicators. Results indicate that a unit change in agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts opening and commercial banks performance indicators led to a positive change in Return on asset. While the inverse is the case with agency banking branches network.

**Table 9: Regression Coefficients**

Variable	Beta	Std. Error	T	Sig
Constant	-0.626	0.058	-10.776	0.000
Agency Banking	-0.019	0.017	-1.13	0.262
Agency Withdraw	0.058	0.016	3.661	0.000
Agency Deposit	0.041	0.017	2.427	0.018
Agency Accounts	0.035	0.017	2.018	0.047
Commercial Bank Performance Indicators	0.068	0.015	4.532	0.000

## 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary of Key Findings

One of the key findings was agency banking withdrawal transaction, agency banking deposit transaction, agency banking accounts opening and commercial banks performance indicators are major determinants of profitability of commercial banks. From the responses and results it is also evident that agency banking branch networking contributes to the profitability of commercial banks. Responses also show that the agency banking branch networking greatly affects the profitability of commercial banks. Results on the agency banking withdrawal transaction on profitability of commercial banks show that most respondents agreed to a great extent and they supported their response by agreeing that the number of withdrawal transaction through agency banking has increased, the value of withdrawal transaction through agency banking has increased, the number of withdrawal through agency banking are more than those of its of peers, the withdraws are available to all customer both corporate and retail and there is enough liquidity to facilitate withdrawals. Results indicated that majority respondents agreed with the statement that agency banking deposit transactions affects the profitability of commercial banks. Respondents supported their response by agreeing that the number of deposit transaction through agency banking has increased, the value of deposit transaction through agency banking has increased, the number of deposit through agency banking are more than those of its of peers, the deposit are available to all customer both corporate and retail and there is enough liquidity to facilitate deposit. This is supported by a p value 0.018 which means that agency banking deposit transactions is a statistically significant factor of bank profitability. Findings indicate that majority of the respondents agreed that agency banking accounts opening services affects the profitability of commercial banks.

## 5.2 Conclusions

It is possible to conclude that banks do obtain economies of scale and scope when they expand their activities, mainly by mergers and acquisitions. Therefore, expanded product array and potential for cross selling result from larger size and depth of product offering.

It is possible to conclude that the introduction of agency branches has bridged the gap between customer and his bank, where the customer can easily go any branch bank close to him and withdraw money agency through the help of the agent and also saves time energy and reduces stress of the customer.

Findings also led to conclusion that depositors are motivated by returns therefore, it is important for banks management to understand the extent that rates of return on deposits influence their customers' decision to deposit.

It is also possible to conclude that banks have to reconsider the optimal mix of channels their customers use to interact with the bank and to transact their banking business from in-person in a branch or with a live agent on the phone to online, mobile, or email.

The study also concluded that to measure the profitability of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin.

## 5.3 Recommendations

The study recommends that for all the commercial banks to earn more profit they ought to increase the number of customers and for their businesses to grow further they have to invest more as well as embrace the adoption of market innovative strategies.

The study recommends that banks should put in place adequate financial resources to be back up the agents. This is because agency banking requires massive financial resources to accommodate the flow in of customers. It also recommends that banks should adapt the new technologies being introduced in order to cope with the fast changing technology.

The study recommends that the banks should emphasize on Cross-selling as they can be useful marketing tools for banks to reach segments of the population that do not yet use traditional banking services.

## 5.4 Areas for Further Study

For further research the study suggests that commercial banks should investigate the effects of innovation strategies. Further study should focus on the factors affecting adoption of agency banking from an agent's point of view. In addition, factors affecting adoption of agency banking from a customer point of view. Further studies should be on the adoption of mobile banking and online banking. Studies should also concentrate on the impact of agency banking on financial access.

## REFERENCES

Adekanye, Femi (2010). *Elements of banking in Nigeria*. 4<sup>th</sup> Edition, Lagos. Fazburn Publishers.

- 
- Adera, A. (1995). *Instituting effective linkages between formal and informal financial sector in Africa: A proposal*. Savings and Development, 1/1995: pp5–22.
- Albertazzi, U. & Gambacorta, L. (2008). Bank profitability, the business cycle. *Journal of Financial Stability, forthcoming*. doi:10.1016/j.jfs.2008.10.002.
- Alexandru, C., Genu, G., Romanescu, M.L. (2008), *The assessment of banking performances- Indicators of Performance in Bank Area*. MPRA Paper No. 11600.
- Athanasoglou, P. P. & Brissimis, S. N. & Delis, M. D. (2007). Bank specific, industry specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money* 18(2): 121-136. doi:10.1016/j.intfin.2006.07.001.
- Beck, T., Demirguc-Kunt, A. and Martinez Peria, M.S. (2007). Reaching Out: Access to and Use of Banking Services Across Countries, *Journal of Financial Economics*, forthcoming.
- Bhuyan, R. & Williams, D. L. (2006). Operating performance of the US Commercial Banks after IPOs: An empirical evidence. *Journal of Commercial Banking and Finance* 5(1/2): 68-95.
- Burns, A. & Groove, B. (2003). *The Practice of Nursing Research: Conduct, critique & utilization*. 4<sup>th</sup> edition. W. B. Saunders Company
- Central Bank of Kenya, (2011). Guidelines on Agent Banking, *Banking Journal*: CBK/15, pp 27-37.
- CGAP (June 2011). Building a Viable Network of Branchless Banking Agents, available at: CGAP.(2010). Banking Agents. PowerPoint presentation <http://www.cgap.org/p/site/com>
- DeYoung R. and Rice T. (2004). Noninterest income and financial performance at US Commercial Bank, *Financial Review*, Vol. 39, pp.101-127.
- Dondo, (2003). *An overview of the Microfinance Industry in Kenya*, A paper presented at the Kenya Institute of Bankers' conference, Nairobi Edwards B, (1997), *Credit Management Handbook*, (4th ed.) Gower Publishing Company.

Gordon (2010). *Retail Bank Customers less Profitable and Less Loyal*, Survey Findings.

Gul, S., Faiza, I, Khalid, Z. (2011) Factors Affecting Bank Profitability in Pakistan. *The Romanian Economic Journal*, 2(3), 6-9.

Hirtle, B. J. & Stiroh, K. J. (2007). The return to retail and the performance of US Banks. *Journal of Banking and Finance* 31(4): 1101-1133. doi:10.1016/j.jbankfin. 2006. 10. 004.

Ho, M. T. & Tripe, D. (2002). Factors influencing the performance of foreign owned banks in New Zealand. *Journal of International Financial Markets, Institutions and Money* 12(4/5): 341-357.

Hyndman, R.J. (2008). Encouraging Replication and Reproducible Research. *International Journal of Forecasting*. 26(1): 2-3

Kamau, A.W. (2009). *Efficiency in the Banking Sector: An Empirical Investigation of Commercial Banks in Kenya*. A thesis submitted in partial fulfillment of the Requirements of Nairobi University for the Degree of Doctor of Philosophy. Nairobi: University of Nairobi

Kempson. E., Atkinson. A. and Pilley. O, (2004). *Policy Level Response to Financial Exclusion in Developed Economies: Lessons for Developing Economies*, The Personal Finance Research Centre prepared for the Department of International Development

Khrawish, H.A. (2011) Determinants of Commercial Banks Performance: Evidence from Jordan. *International Research Journal of Finance and Economics*. Zarqa University, 5(5), 19-45

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, 2001.

Kombo, D.K. & Tromp, D.L.A. (2009). *Proposal and Thesis Writing: An Introduction*. Paulines Publications Africa.



- 
- Kosmidou, K. & Zopounidis, C. (2008). Measurement of bank performance in Greece. *South Eastern Europe Journal of Economics* 6(1): 79-95.
- Kosmidou, K. (2008). The determinants of banks' profits in Greece during the period of EU financial integration. *Managerial Finance* 34(3): 146-159. doi: 10.1108/03074350810848036
- Lamido, (2010). Effects of cash withdraw on bank profitability Working Papers Series. *Business Day Newspaper* of October 13.
- Lazo, B., and Barrie, A. (2005). The business and technological history of automated teller machines in the UK, 1967-2005, a Primer. Conference Abstracts, 16-17th June. Queen Mary, University of London.
- Mulupi, D. (2011). *Kenya: taking mobile money a step further*. Nairobi. Retrieved from [www.audiencespace.org](http://www.audiencespace.org) field blog. Retrieved: 17th November 2012.
- Murthy, Y., Sree, R. (2003) *A Study on financial ratios of major Commercial Banks*. Research Studies, College of Banking & Financial Studies, Sultanate of Oman.
- Mwega, F.M. (2009). *Global financial crisis: Kenya: Discussion series*. Paper 7. [Online]. May 2009.
- Newing, H. (2011). *Conducting research in conservation: Social science methods and practice*. New York: Routledge
- Nganga, S.I. & Mwachofi, M.M. (2013). Technology adoption and the banking agency in rural Kenya *Journal of sociological research* VOL4, No 1.
- Ogunlewe, R.W. (2001). Sensitivity of bank stock returns to market and interest rate risks: An Empirical Investigation. *Nigerian Deposit Insurance Corporation Quarterly Review*, Volume 11, Nos. 1-2, March/June: pages 57-77.
- Oloo, O. (2009). *The Banking Survey 2009*. Think Business. Nairobi

- 
- Podpiera, J. (2008). *Emerging banking market experience*, Journal of Financial Stability Working Paper No. 6, Czech National Bank.
- Ramcharan, R. (2009). Sound policies shield South Africa from worst of recession. *IMF African Department IMF survey magazines: countries and regions survey*.
- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*. (5th Edition). London: Prentice Hall
- Sekaran, U. & Bougie, R. (2011). *Research methods for business : A Skill building approach*. 5<sup>th</sup> Edition. Aggarwal printing press, Delhi, ISBN: 978-81-265-3131-8
- Selden and Colvin (2004). *Killer Customers: Tell the Good from the Bad – and Crush Your Competitors*.
- Stiroh, K. J. & Rumble, A. (2006). The dark side of diversification: The Case of US Financial Holding Companies. *Journal of Banking and Finance* 30(8): 2131-2161. doi:10.1016/j.jbankfin.2005.04.030
- Wairi, D.K. (2013). *Factors influencing the adoption of agent banking innovation among commercial banks in Kenya*. Unpublished MBA Thesis. University of Nairobi
- Wen, W. (2010) *Ownership Structure and Banking Performance: New Evidence in China*. Universitat Autònoma de Barcelona Departament D'economia de L'empresa, 2010.
- Williams, B. (2003). Domestic and international determinants of bank profits: Foreign banks in Australia. *Journal of Banking and Finance* 27(6): 1185-1210. doi:10.1016/S0378-4266(02)00251-0.
- Yu .D. & Fleming .J. (2013). *How customers interact with their bank*. Retrieved from Gallup Business Journal website