

Effects Of Agency Banking On Return On Assets Of Commercial Banks In Kenya

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Abstract: This research study aimed at analyzing the effect of agency banking on Return on Asset of commercial banks in Kenya. This is because; the adoption of agency banking is geared to improve the market share and profitability but to this end, it is not clear whether the adoption has led to increase in profitability of commercial banks. Question still remains unanswered as to why commercial banks are embracing the new model of business and what are its advantages and disadvantages. In particular the specific objectives were to determine the effect of the increase in the number of agents on Return on asset, to determine the relationship between increase in volume of cash deposits transactions done by agents and Return on asset and to establish the effect of volume of loan repayment through agency on Return on assets of commercial banks in Kenya. The study adopted causal-effect research design. Primary data was collected using questionnaires; secondary data was collected through reviewing relevant literature materials. This study utilized Agency theory, bank-led and Non-Bank-Led theory. Data obtained was analyzed using multiple linear regression models using Statistical package for social sciences (SPSS). The study targeted all the 44 commercial banks operating in Kenya. The researcher used census to select all commercial banks licensed to operate agency banking. The study carried out used regression analysis to find the relationship between agency banking in terms of number of agents, volume of cash deposits and loan repayment transactions undertaken through agents and the financial performance as measured by Return on assets. The study carried out shed light on the fact that number of agents, volume of cash deposits and volume of loan repayment through agents all combined are directly correlated with the bank financial performance as measured by return on assets. This is further supported by the fact that Pvalue is less than 0.05. Data presentation was done using frequency tables. The study gave recommendation that give insight on effects of agency banking on Return on Asset of commercial banks in Kenya. Key recommendations were to allow agents to perform core activities to efficiently utilize their capabilities and enhance security for the agents to handle greater volumes of cash and reach more clients.

I. INTRODUCTION

This chapter presents the background of the study, statement of the problem, objectives of the study, research questions, limitations of the study and the scope.

A. BACKGROUND OF THE STUDY

Banking industry in Kenya is governed by the companies act, the banking Act, the central Bank of Kenya act and the various prudential guidelines issued by the central bank of

Kenya (CBK). Agency banking model has led to further expansion of the distribution of banking services leading to the establishment of village banks. 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. The agency banking in Kenya guidelines were enacted in 2010. Banks must first apply to Central Bank of Kenya (CBK) to get approval to conduct agency banking business. The board of directors of each banking institution interested in agency banking must make policies guidelines and procedures to be followed to ensure that: The agents are

credible, risk identification and mitigation measures are in place, and agents are audited on an ongoing basis to ensure that the Agents follow the guidelines from central Bank, their contracts and the banking policy, that is according to www.bankingkenya.com July 5, (2011).

Koech, (2009) defines a banking agent as a retail or postal outlet contracted by a financial institution or a mobile network operator to process clients' transactions. Rather than a branch teller, it is the owner or an employee of the retail outlet who conducts the transaction and lets clients deposit, withdraw, and transfer funds, pay their bills, inquire about an account balance, or receive government benefits or a direct deposit from their employer. Banking agents can be pharmacies, supermarkets, convenience stores, lottery outlets, post offices, and many more.

The use of agency model by banks has continued to improve access of banking services since its launch in 2010. As at 30th June 2013, CBK has authorized 13 commercial banks to offer banking services through third parties (agents). The increased number and value of transactions demonstrated the increased role of agent banking in promoting financial initiatives being championed by the central Bank. (CBK 2013) Many banks offer a direct connection from bank accounts to M-PESA, allowing customers to transfer funds between both bank accounts and Mpesa. According to a survey on agency banking carried out by Kenya Bankers Association (KBA 2012) most of the transactions are cash deposits and withdrawals. Customers are asking for additional services not on offer, including recommendation for loan which require closer supervision and more expertise than agents have.

B. STATEMENT OF THE PROBLEM

Central Bank of Kenya (CBK) recognizes the challenges which the country faces. These include the cost of financial services and the distance to bank branches in remote areas. Part of their approach to addressing these challenges is to promote innovation through mobile financial services and to address the delivery channel costs through increased use of agent banking (Central Bank of Kenya, 2010). According to CBK, in pursuit for cheaper deposits the percentage increase of bank branches in 2012 was higher than the percentage increase in bank agents despite cost saving associated with agency banking.

The adoption of agency banking is mainly geared to improving financial performance and creates variety of services. To this end, it is not clear whether the adoption has led to increase in market share and financial performance. The problem faced by the banks in use of this strategy is that consumers who ought to accept services brought closer to them are not taking up the opportunity but instead still travel to far bank branches. This study therefore aimed at assessing the effect of agency banking on Return on Asset of commercial banks in Kenya.

C. OBJECTIVE

a. GENERAL OBJECTIVES

The main aim of the study was to determine the effect of agency banking on Return on Assets of commercial banks in Kenya.

b. SPECIFIC OBJECTIVES

The specific objectives of the study are as follows:

- ✓ To determine the effect of the increase in the number of agents on Return on Assets.
- ✓ To determine the relationship between increase in volume of cash deposits transactions done by agents and Return on Assets.
- ✓ To establish the effect of volume of loan repayment through agency on Return on Assets of commercial banks in Kenya.

D. RESEARCH HYPOTHESIS

- ✓ H_{01} : There is no relationship between increase in number of agents and Return on Assets.
- ✓ H_{02} : There is no relationship between increase in volume of cash deposits transactions done by agents and Return on Assets.
- ✓ H_{03} : There is no relationship between volume of loan repayment through agency on Return on Assets of commercial banks.

D. SIGNIFICANCE OF THE STUDY

The findings of this study is of beneficial to senior management of commercial banks who will use the findings to strategize on how they can mutually benefit from this development by embrace technology and engaging in agency banking. The study also add to the existing literature, and is a valuable tool for students, academicians and individuals who want to learn more about agency banking. The information that was gathered is of much help to the business owners of retail outlets like supermarkets and retail shops who would be interested in operating an agency bank at their business premises. Also, it helps those that are currently operating as bank agents to appreciate the effects of the factors of agency banking. The government and other regulatory bodies benefit from this study since it opens up issues that may require regulation as well as open new channels of revenue generation from increased tax bases from the agents and banks.

E. SCOPE

The study was done in Nairobi where the head offices of the 11 commercial banks operating Agency Banking in Kenya and NSE are located. The study was based on the experiences of employees of commercial banks in Kenya who interact either directly or indirectly with the licensed banking agents in Kenya. This study was done in the month of October 2014 to March 2015.

F. LIMITATION OF THE STUDY

Non response occurred and this reduced the sample. This was minimized by giving the respondent the assurance that the information was used for academic purposes only and will be handled with utmost confidentiality.

The research was limited to those banks that operate agency banking only. The findings were generalized to include commercial banks not operating agency banking.

The duration in which agency banking has been in operation is rather short since the inception of agency banking. Longer historical data will set a good base for a more concrete research and this will give more concrete results.

Lastly the dependent variable ROA was used as a measure of financial performance but other indicators like ROE would have generated a different outcome of the study

II. LITERATURE REVIEW

A. INTRODUCTION

The review was done to identify and evaluate various contributions of other scholars over the same topic. The chapter presents agency theories in banking, the global development of agent banking in different countries and the success factors of agency banking and chapter ends with a gap to be filled.

B. THEORETICAL REVIEW

Branchless banking represents a new concept that embraces technology in advancing services to the customers at locations more convenient to them. A wide spectrum of branchless banking models is evolving (State Bank of Pakistan, 2011). Theories of branchless banking can be classified as follows: Bank-focused theory, Bank-led theory, and Nonbank-led theory and Agency theory.

a. BANK-LED THEORY

In the most basic version of the bank-led theory of branchless banking, a licensed financial institution (typically a bank) delivers financial services through a retail agent. That is, the bank develops financial products and services, but distributes them through retail agents who handle all or most customer interaction (Lyman, Ivatury and Staschen, 2006). The bank is the ultimate provider of financial services and is the institution in which customers maintain accounts. Retail agents have face-to-face interaction with customers and perform cash-in/ cash-out functions, much as a branch-based teller would take deposits and process withdrawals (Owens, 2006).

In some countries, retail agents also handle all account opening procedures and, in some cases, even identify and service loan customers. Virtually any outlet that handles cash and is located near customers could potentially serve as a retail agent. Whatever the establishment, each retail agent is outfitted to communicate electronically with the bank for

which it is working. The equipment may be a mobile phone or an electronic point-of-sale (POS) terminal that reads cards.

Bank-led model offers a distinct alternative to conventional branch-based banking in that customer conducts financial transactions at a whole range of retail agents instead of at bank branches or through bank employees (Lyman, Ivatury and Staschen, 2006). This model promises the potential to substantially increase the financial services outreach by using a different delivery channel (retailers/mobile phones), a different trade partner (Chain Store) having experience and target market distinct from traditional banks, and may be significantly cheaper than the bank based alternatives. In this model customer account relationship rests with the bank (Tomašková, 2010).

The bank lead theory is related to the study as it focus on how financial institution like bank deliver their financial services through a retail agent, where the bank develops financial products and services, but distributes them through retail agents who handle all or most customer interaction . For example; Cooperative bank of Kenya distributes it financial product through it Coop kwa Jirani agent, where the agent have face-to-face interaction with customers and perform cash-in/cash-out functions, much as a branch-based teller would take deposits and process withdrawals .

b. NON-BANK-LED THEORY

In this theory customers do not deal with a bank, nor do they maintain a bank account. Instead, customers deal with a nonbank firm either a mobile network operator or prepaid card issuer and retail agents serve as the point of customer contact. This model is riskier as the regulatory environment in which these nonbanks operate might not give much importance to issues related to customer identification, which may lead to significant Anti-Money Laundering and Counter-Terrorism Financing (AML/CFT) risks. Bringing in a culture of Know Your Customer (KYC) to this segment is a major challenge. Further the nonbanks are not much regulated in areas of transparent documentation and record keeping which is a prerequisite for a safe financial system. Regulators also lack experience in the realm. For these reasons, allowing nonbank-led model to operate is an unnecessarily big leap and an unjustifiably risky proposition. However, this model becomes viable after regulators have gained sufficient experience in mitigating agent related risks using bank led model and need to think about mitigating only e-money related risks (Kapoor, 2010).

According to Hogan (1991) to mitigate the e-money risks (which are peculiar to Nonbank-led model), necessary changes in the existing regulations are required. It starts by bringing non-banks under financial regulatory net by giving these entities special status of some sort of quasi-bank/remittance agent etc. Grant of this status depends upon meeting pre-specified standards of transparency, financial strength and liquidity. There should be clear, well-defined limits on nature, type and volume of transactions that such entities can undertake. To avoid insolvency, these entities may be required to deposit their net e-banking surplus funds with scheduled banks meeting certain minimum rating criteria (State Bank of Pakistan, 2011). The Nonbank-led Theory is found relevant to

the study as it explain how agent deals with customers on behalf of the bank.

One of the most successful applications of the nonbank model is the safaricom's M-Pesa model in Kenya.

c. *BANK-FOCUSED THEORY*

The bank-focused theory emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. Examples range from use of automatic teller machines (ATMs) to internet banking or mobile phone banking to provide certain limited banking services to banks' customers. This model is additive in nature and may be seen as a modest extension of conventional branch-based banking.

Although the bank-focused model offers advantages such as more control and branding visibility to the financial institutions concerned, it is not without its challenges. Customers' primary concerns are to do with the quality of experience, security of identity and transactions, reliability and accessibility of service and extent of personalization allowed. Banks address these issues by providing a branchless banking service with an easy to use interface, made secure with the help of multi-factor authentication and other technology, capable of running uninterrupted 365 days a year (Kapoor, 2010).

The bank-focused theory emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. With the use of agent Cooperative bank achieves economies of scale by serving many customers at low cost; this is therefore related to the study as Cooperative bank utilizes Coop kwa Jirani agents for low cost delivery of its financial services.

d. *AGENCY THEORY*

Benefits of agent banking are among others bringing banking services closer to the customers for example customers can apply to lines of credit, credit cards, loans and mortgages through these agents hence, fewer visits are required to banks for doing bank transactions (Purcell et al, 2003). Rikta (2007) mentioned that in Bangladesh, customers had to visit on an average 1.5 times to their lenders for a single loan. Wendel and Williams (2001) mentioned that agent businesses are more profitable and produce higher revenues, than commercial banks that use only branch networks. Agent banking requires a good infrastructure in terms of road network, communication and information technology, location and convenience.

C. EMPIRICAL LITERATURE

a. *THE CONCEPT OF AGENCY BANKING*

In understanding agency, there are three parties to a transaction: The customer, the agent's employee who operates the point of sale device and the bank. Each party should authenticate themselves before initiating any transaction, preferably with two factors of security hence; the customer and the authorized employee of the Agent each have a

personal card plus a secret PIN. To avoid fraudulent POS terminals, a bank could also announce a unique secret key to each of its clients through which the bank identifies itself to its clients before each transaction (Ivatury, 2008).

For each agent the institution would want to appoint as an agent, "a bankers cheque of Kshs. 1000 per agent or outlets is payable to the central bank of Kenya, being the approval fees, an agent approval granted by the central bank shall be valid for one year and may be renewed as provided for in the guidelines". The guidelines show that "if an institution fails to pay the prescribed fees within 90 days after the end of the financial year, its agent renewal application shall be declined. (The CBK guideline on agent banking 2010). In this study indicators of agency banking are number of agents, volume of cash deposits, cash withdrawals, bills payment and loan repayments through agents.

b. *RELATIONSHIP BETWEEN AGENCY BANKING AND SALES VOLUME*

The relationship between agency banking and sales volume has been expored through diversification which is a form of growth strategy for an organization and seeks to increase profitability through greater sales volume obtained from new products and new markets (Wan and Hoskisson 2003 and Wan 2005). High levels of diversification improve firm performance even when a country's institutional environment is inadequately developed. From a financial point of view, they include cost reduction, asset depreciation and risk reduction (Berger and Ofek, 1995). Strategic advantages involve synergies or the expansion, creation and improvement of long-term strategic assets (Li and Greenwood, 2004). These advantages are particularly evident in the tourism sector: synergies, cost sharing, risk reduction or brand improvement. In addition, resource diversification contributes to long-term sustainability and regional development (Ivars, 2003). On the other hand, some studies join the general consensus in corporate literature and argue that the cost of diversification might outweigh the benefits. Therefore, an institution should focus on a single line of business so as to take the maximum advantage of management's expertise and reduce agency problems, leaving investors to diversify on their own. Consistent with this view is a general agreement that seems to be observed concerning the negative impact of the diversification strategy on the performance of the firm (Lang and Stulz (1994), Berger and Ofek (1995).

Diversification as a strategy has been adopted by several commercial banks in Kenya in establishing agent banking business and this has enabled them to improve in their service delivery and widening their target market across the country. Agent banking as a diversification strategy represents a significant opportunity to reduce transaction costs such as travel for clients by bringing financial services to hard-to-reach and geographically dispersed areas. Banks and other financial institutions often do not have sufficient incentive or capacity to establish formal branches in these areas. The set-up of agent banks is less costly and more flexible than for traditional bank branches: it reduces the need to invest in staff and physical infrastructure.

c. *EFFECT OF AGENCY BANKING ON RETURN ON EQUITY*

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 and Alexandru et al., 2008).

Return on Equity (ROE): ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet.

ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROE is the ratio of Net

Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

Return on Asset (ROA): ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources.

Net Interest Margin (NIM): NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest earning) assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). The NIM variable is defined as the net interest income divided by total earnings assets (Gul, Faiza & Khalid, 2011).

Net interest margin measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank. The higher the net interest margin, the higher the bank's profit and the more stable the bank is. Thus, it is one of the key measures of bank profitability. However, a higher net interest margin

could reflect riskier lending practices associated with substantial loan loss provisions (Khrawish, 2011).

This is an agent that is often managed by a telecom, uses a cell phone to identify entrepreneurs, and provides store-of-value accounts called bank wallets that are backed by bank deposits. Entrepreneurs can use bank wallets to send, receive, and store electronic monetary value. For this analysis, agency banking is a store of value account that provides a useful comparison for a savings account directly provided by a financial institution. Bank-provided account linked to a bank wallet. This is a bank account that is linked to a bank wallet. The bank does not manage the agent and pays a fee to the telecom for deposits and withdrawals.

Kitaka (2001) indicates that the cost and revenue estimation is done on a per account basis for transactional accounts, commitment savings accounts, reverse commitment accounts, and time deposits. It focuses on the costs and revenues incurred by the financial agent bank associated with account opening, financial margin, and transactions for low-cost accounts. The revenue assumptions are based on a view that financial agent banks can and should charge for withdrawals and transfers through agent channels. Although some institutions in the sample do not, this may be counterproductive when reaching new low-income markets where entrepreneurs have a higher willingness to pay for nearby transaction services and where the financial margin earned on lower-balance accounts was insufficient to cover the cost of maintaining that account. We envision that clients will transact more with greater proximity to agents

Agency banking has positively and significantly influenced performance of commercial banks. Banking agents enable commercial banks to divert existing customers from crowded branches providing a "complementary", often more convenient channel. They use agents to reach an "additional" client segment or geography. Otherwise, reaching poor clients in rural areas is prohibitively expensive for banks since transaction numbers and volumes do not cover the cost of a branch. Banking agents that piggy back on existing retail infrastructure –and lower set up and running cost –play a vital role in offering many low-income people 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 which increases the commercial banks' revenue. Agency banks also improves banks performance as it reduces huge savings on cost of construction of bank premises and leasing costs than when banks are using the Agency premises. It also cuts on human resource expenses. The banks do not have to employ new staff to manage the agency and the cost of training if any is to the bare minimum. It further, saves on equipment like furniture and computers. Additionally, the convenience of access to banking services and the extended hours that the banking agencies work is attractive features to the customer. This also helps increase banks' revenue will minimizing costs.

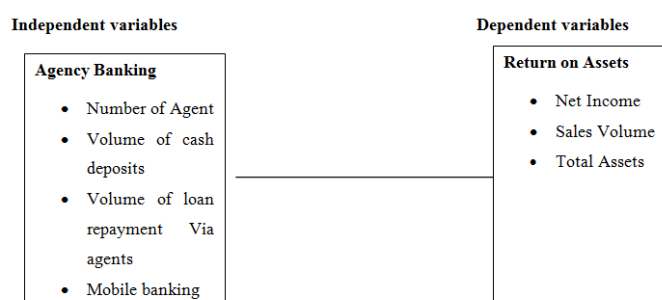
Harvey, Lins & Roper (2004) tested whether debt can mitigate the effects of agency and information Problems. They focused on emerging market firms for which for which pyramid ownership structures created potentially extreme managerial agency cost. The results were found to support the recontracting hypothesis that equity holders value compliance

with monitored convents particularly when firms were likely to overinvest.

Berger & Patti (2006) proposed a new approach to test corporate governance theory using profit efficiency or how close a firm's profit are to the benchmark of a best practice firm facing the same exogenous conditions. They found out that data on US banking industry was consistent with the theory and the results were statistically significant, economically significant and robust.

Selling & Stickney (1989) studied ROA's profit Margin and asset turnover of some 22 industries over the 1977-86 period and indicated that industries with significant operating leverage and high entry barriers tended to have the lowest asset turnover and the lowest profit margin.

D. CONCEPTUAL FRAMEWORK



Source: (Researcher 2015)

Figure 2.1

The direct effects of agency banking include increased bank accounts because of the increase in the number of agents, increased financial literacy, better appreciation of and consumption of financial services, and increased savings cash deposits and withdrawals. Return on assets is a company's net income divided by its average of total assets. Net income is the amount earned by the company after subtracting out the expenses incurred, including depreciation and taxes.

E. RESEARCH GAP

Despite the relevance of the agency banking in the commercial banks gaining competitiveness and enhancing performance, there has been limited research conducted locally specifically on the contribution of agency banking on commercial banks performance.

III. RESEARCH METHODOLOGY

A. INTRODUCTION

This chapter presents research methodology, research design, target population, sample size, sample procedures, research instruments used, research analysis, validity and reliability and ethical issues.

B. RESEARCH DESIGN

This study used causal research design. This deals with investigation of a cause and effect relationship. It is described

as an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables (Cooper and Schindler 1999, Business Research methods, sixth edition). Hence, factors which are considered important for the improved performance of commercial banks as a result of the growth of agency banking were obtained through this design from the respondents.

C. TARGET POPULATION

The target population for this study is 44 credit and risk managers for all the commercial banks operating in Kenya (CBK, 2013).

D. SAMPLE SIZE

Census of all the 44 registered banks was conducted and therefore no sampling was conducted on commercial banks listed in NSE.

E. DATA COLLECTION AND PROCEDURE

Data collection is facts and figures relating to a particular activity under study; the researcher used both primary and secondary data.

The data collection tool used was questionnaires since it is a more appropriate way of addressing sensitive issues, especially when the study is to offer anonymity to help avoid reluctance or deviation from respondents, Babbie (2004). In this study a questionnaire was appropriate due to the stringent conditions in banks and the banker's busy schedule. The main data collection procedure is 'drop and pick method', the researcher simply delivers the questionnaires to the respondents and collects them after filling. This is ideal to administer the questionnaire to the respondents who have busy schedules and therefore allowing the researcher appropriate time to analyze the data within the time constraints

Secondary data was collected through extensive analysis of audited financial reports of commercial banks and their monthly credit reports on the quality of the loan portfolio.

F. RELIABILITY

Reliability refers to a condition where a measurement process yields consistent scores (given an unchanged measured phenomenon) over repeat measurements. Perhaps the most straightforward way to assess reliability is to ensure that they meet the following three criteria of reliability namely; test -retest, inter- item and inter-observer reliability. Test-retest reliability entails conducting the same questionnaire to a large sample at two different times. For the questionnaire to be considered reliable, people in the sample do not have to score identically on each test, but rather their position in the score distribution should be similar for both the test and the retest

The reliability was measured using Cronbach's Alpha reliability coefficient for Likert-type scale, Cronbach, L. (1951)

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Here N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance. Threshold of 0.7 and above is considered reliable.

G. VALIDITY

A test is considered valid, if it measures what it claims to measure. Validity is the degree to which the results obtained from analysis of the data actually represents the phenomenon under study Kothari (1998). A valid measure should satisfy four criteria; face, content, criterion-related and construct validity. The validity of the research instruments were ensured by assessing the questionnaire items during their construction.

H. DATA ANALYSIS AND PRESENTATION

The data obtained was edited to eliminate errors and coded in readiness for analysis. Data analysis was done using multiple regression model since it allows simultaneous investigation of the effect of two or more variables. The model establishes the relationship between agency banking and the performance of commercial banks in Kenya using various key performance indicators.

The regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where Y=Financial performance measure the key indicator being Return on Assets

β_0 =Constant

β_1 to β_4 =Regression coefficients

X1= Number of Agents

X2= Volume of loan Repayment through Agency

X3= Agency Volume of cash deposit transactions done by agents

ϵ = Coefficient of error

The quantitative data was analyzed using descriptive statistics; mean, median, mode, dispersion and the findings was presented in tabular form (Robson, 2003).

I. ETHICAL CONSIDERATIONS

The study maintained high ethical standards and did not disclose any information about the bank and its clients to third parties. The Research was conducted in a professional way. Confidentiality of all participants was maintained as they were assigned a study number and no participant identifiers were used. The findings of the study were shared with the participants and all the relevant authorities. The researcher offered guidance to the respondents appropriately when responding to the questionnaires. The questions were simple and clear to avoid misinterpretation of question.

IV. DATA ANALYSIS AND DISCUSSION

A. INTRODUCTION

This chapter presents the research results and discussions based on the three objectives of the study. The objectives of the study were:

- ✓ To determine the effect of the increase in the number of agents on Return on Assets.
- ✓ To establish the effect of volume of loan repayment through agency on Return on Assets of commercial banks in Kenya.
- ✓ To determine the relationship between increase in volume of cash deposits transactions done by agents and Return on Assets.

Usable response was 39 banks out of the 44 targeted bank this represented 89% of the respondents.

B. BIO-DATA AND GENERAL INFORMATION

This section contains personal information about the respondent as below

	Frequency	Percentage	Valid Percent	Cumulative Percent
Valid Male	20	51.3	51.3	51.3
Female	19	48.7	48.7	100.0
Total	39	100.0	100.0	

n=39

Source: Field data (2015)

Table4.1: gender

From table 4.1 it is evident that the male respondents constitute a major part of the respondents indicated by 51.3% with female respondents constituting only 48.7%.this implies that most respondents were male and it may be assumed that most of the bank's employees are male

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 20yrs	6	15.4	15.4	15.4
21 to 30 yrs	16	41.0	41.0	56.4
31 to 40yrs	17	43.6	43.6	100.0
Total	39	100.0	100.0	

n=39

Source: Field data (2015)

Table4.2: age

The results as per Table 4.2 indicate that15.4% of the respondents are below 20 years,41% are aged between 21 to 30 years,43.6% between 31 to 40 years. This implies that majority of the respondents (43.6%) are in the 31 to 40 years age bracket.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Masters	6	15.4	15.4	15.4
bachelors	14	35.9	35.9	51.3
Tertiary	19	48.7	48.7	100.0

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Masters	6	15.4	15.4	15.4
bachelors	14	35.9	35.9	51.3
Tertiary	19	48.7	48.7	100.0
Total	39	100.0	100.0	

n=39

Source: Field data (2015)

Table 4.3: level of education

From table 4.3 its evident that 48.7% of the respondents hold tertiary education and they form majority of the respondents, respondents with bachelors education amount to 35.9%, those with masters degree totaled up to 15.4%. This implies that majority of the respondents are literate. This makes a good sample as the respondents understand the questions and are able to give the intended response.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Security	17	43.6	43.6	43.6
volume of cash deposit	21	53.8	53.8	97.4
financial capability	1	2.6	2.6	100.0
Total	39	100.0	100.0	

n=39

Source: Field data (2015)

Table 4.4: Factors that affect agency banking with regard to performance

From table 4.4 53.8% believe that volume of cash deposits affects agency banking, 43.6% believe that security affects agency banking and 2.6% believe that financial capability affects agency banking with regards to performance.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0 to 4 yrs	14	35.9	35.9	35.9
5 to 9 yrs	18	46.2	46.2	82.1
10 to 14 yrs	7	17.9	17.9	100.0
Total	39	100.0	100.0	

n=39

Source: Field data (2015)

Table 4.5: length of time working for the bank

Results as per table 4.5 indicate that 46.2% of the respondents have worked between 5 to 9 years, 35.9% have worked between 0 to 4 years and 17.9% between 10 to 14 years. This implies that majority of the respondents have worked between 5 to 9 years. This could mean that majority of the bank employees are aware of agency banking.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.187 ^a	.035	.009	.10027

Table 4.7 : ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
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1	Regression	.013	1	.013	1.335	.255 ^a
	Residual	.372	37	.010		
	Total	.385	38			

a. Predictors: (Constant), volume of cash deposits

b. Dependent Variable: ROA

Table 4.7 : ANOVA^b

Table 4.7 F value is not significant since $p > 0.05$. The F values are used to determine if the independent variables reliably predict the dependent variable and thus the suitability of the model. The p value of 0.255 is compared to alpha level of 0.05 and from the table this value is $>$ hence we can conclude that the volume of cash deposits do not reliably predict performance as measured by return on assets.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.084	.019		4.427	.0001
volume of cash deposits	4.755	.000	.187	1.155	.255

a. Predictors: (Constant), volume of cash deposits

b. Dependent Variable: ROA

Table 4.8 results showed that the relationship between volume of cash deposits and ROA is not significant since $P > 0.05$ as a result fail to reject the null hypothesis that there is no relationship between increase in volume of cash deposits transactions done by agents and ROA. This implies that cash is a non earning asset and does not necessarily influence variation in ROA. The study is in support of Koech, E. (2009) who studied on the effects of agency banking on expansion of financial services in Kenya and found that the financial performance of commercial banks in Kenya is driven by volume of cash deposits and number of agents.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925 ^a	.856	.852	.03872

a. Predictors: (Constant), volume of loan repayments

b. Dependent Variable: ROA

Table 4.9: Model Summary

From table 4.9 result indicate that R square is .856 this indicates that only 85.6% of the variations between dependent and independent variations are accounted for or explained this therefore indicates a strong relationship between dependent and independent.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.330	1	.330	220.040	.0001 ^a
Residual	.055	37	.001		
Total	.385	38			

a. Predictors: (Constant), volume of loan repayments

b. Dependent Variable: ROA

Table 4.10: ANOVA^b

Table 4.10 F value is significant since $p < 0.05$. The F values are used to determine if the independent variables reliably predict the dependent variable and thus the suitability of the model. The p value of 0.0001 is compared to alpha level of 0.05 and from the table this value is $<$ hence we can conclude that the volume of loan repayments reliably predict performance as measured by return on assets.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.030	.008		3.894	.000
	volume of loan repayments	7.094	.000	.925	14.834	.0001

- a. Predictors: (Constant), volume of loan repayments
b. Dependent Variable: ROA

Table 4.11: Coefficients^a

Table 4.11 results showed that the relationship between volume of loan repayments and ROA is significant since $P < 0.05$ as a result reject the null hypothesis. This implies that volume of loan repayments affects ROA. The results of this study findings are in support Kumar, A., Nair, A., & urdapilleta, A. (2006) who studied on expanding bank outreach through retail partnership and found that banks have recently developed extensive networks which results in lower costs and shared risks for participating financial institutions, making these arrangements an attractive vehicle for outreach to the underserved especially for financial services such as payments and transactions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.690 ^a	.476	.462	.07391

- a. Predictors: (Constant), number of Agents
b. Dependent Variable: ROA

Table 4.12: Model Summary

From table 4.12 results indicate that R square is .476 this indicates that only 47.6% of the variations between dependent and independent variations are accounted for or explained this therefore indicates a fair relationship between dependent and independent.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.183	1	.183	33.568	.0001 ^a
Residual	.202	37	.005		
Total	.385	38			

- a. Predictors: (Constant), number of agents
b. Dependent Variable: ROA

Table 4.13: ANOVA^b

Table 4.13 F value is significant since $p < 0.05$. The F values are used to determine if the independent variables reliably predict the dependent variable and thus the suitability of the model. The p value of 0.0001 is compared to alpha level

of 0.05 and from the table this value is less than hence it can be concluded that the number of agents reliably predict performance as measured by return on assets.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.018	.018		1.037	.306
	number of agents	.000	.000	.690	5.794	.0001

- a. Predictors: (Constant), number of agents
b. Dependent Variable: ROA

Table 4.14: Coefficients^a

Table 4.14 results showed that the relationship between number of agents and ROA is significant since $P < 0.05$ as a result reject the null hypothesis that number of agents affect ROA. This implies that the number of agents significantly affect return on Assets. The results are in support of Lyman, Ivatury and Staschen (2006) who studied on the relationship between agency banking and financial performance and found that there is a positive relationship between agency banking and financial performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 ^a	.904	.896	.03253

- a. Predictors: (Constant), volume of cash deposits, number of agents, volume of loan repayments

Table 4.15: Model Summary

Predictors: (Constant), volume of cash deposits, number of agents, volume of loan repayments

Dependent variable: Bank financial performance as measured by return on Assets.

From Table 4.15 R-Square=0.904 is the proportion of variance in the dependent variable ROA which can be predicted from the independent variables volume of cash deposits, number of agents, volume of loan repayments. This value indicates that 90.4% of variations between dependent and independent variables are explained showing a significant relationship

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.348	3	.116	109.771	.0001 ^a
Residual	.037	35	.001		
Total	.385	38			

- a. Predictors: (Constant), volume of cash deposits, number of agents, volume of loan repayments
b. Dependent Variable: ROA

Table 4.16: ANOVA^b

Significance test for the model is represented in the ANOVA table under columns F and sig columns. F value is the mean square regression divided by the mean Square Residual. These values were used to determine if the independent variables predict the dependent variable and thus the suitability of the model.

From the table 4.16 the P-value of 0.001 when compared to the Alpha level of 0.05 is smaller hence we can conclude that the), volume of cash deposits, number of agents, volume of loan repayments combined reliably predict the dependent variable.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.013	.008		1.638	.110
number of agents	6.240	.000	.262	4.136	.0001
volume of loan repayments	6.078	.000	.793	12.465	.0001
volume of cash deposits	-1.370	.000	-.054	-.992	.328

a. Dependent Variable: ROA

Table 4.17: Coefficients^a

Predictor (constant) refers to the number of agents, volume of loan repayments and volume of cash deposits.

From the table 4.17, the following regression equation was established

$$Y = 0.13 + 6.24X_1 + 6.078X_2 - 1.37X_3 + 0.008$$

Test results for significance are calculated by the SPSS and this is represented by two columns t and Sig. These columns provide the t-value and P-value used in testing the null hypothesis by comparing each P-value to a preselected value of alpha at 0.05.

Coefficients having P-value less than Alpha are statistically significant and will reject the null hypothesis.

The coefficient for number of agents is (6.24) is statistically significant because its sig of 0.001 is less than 0.05

The coefficient for Volume of loan repayments is (6.078) is statistically significant because its sig of 0.001 is less than 0.05

The coefficient for Volume of cash deposit is (-1.37) is not statistically significant because its sig of 0.328 is larger than 0.05

From the equation $Y = 0.13 + 6.24X_1 + 6.078X_2 - 1.37X_3 + 0.008$

Y = Financial performance measured by return on Assets

0.13 = Regression constant alpha which shows that in the absence of agency banking activity the financial performance as measured by ROA would be 13%

$\beta_1 = 6.24$ indicates that a unit change in number of agents results in a 6.24 increase in ROA

$\beta_2 = 6.078$ indicates that a unit change in Volume of loan repayment through agents will result in a 6.078 increase in ROA

$\beta_3 = -1.37$ indicates that a unit change in Volume of cash deposits results in a -1.37 increase in ROA

From the variance table above, the significance value standing at .0001 which is less than the threshold of 0.05 for rejecting the null hypothesis hence we can reject this hypothesis at 95% confidence level set

ANOVA findings and the significance test conducted showed that there is correlation between the predictor variables and the dependent variables since significance is less than 0.05

In conclusion the regression model satisfy the statistical threshold of predicting the effect of agency banking on financial performance of commercial banks as measured by ROA

Predictor variables are said to be correlated if their coefficient of correlation is less than 0.05

From the calculation coefficient is less than 0.05. it can be concluded that high correlation between the dependent variable ROA and the predictor variables, number of agents, volume of loan repayment and volume of cash deposits contribute to the financial performance of commercial banks as measured by ROA

V. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

A. INTRODUCTION

This section gives an overview of the research project in form of a brief summary of the findings arrived at after the modeling, the conclusions drawn from these findings and the recommendations based on the three objectives of the study. The objectives of the study were:

- ✓ To determine the effect of the increase in the number of agents on Return on Assets.
- ✓ To establish the effect of volume of loan repayment through agency on Return on Assets of commercial banks in Kenya.
- ✓ iii) To determine the relationship between increase in volume of cash deposits transactions done by agents and Return on Assets.

B. SUMMARY OF MAJOR FINDINGS

The study found that most of the agencies banking services were operated by male. The researcher also found that most of the respondents were aged between 31 to 40 years

The study revealed key findings from the variance determined in the model summary satisfy the statistical threshold of predicting the effect of agency banking on financial performance of commercial banks as measured by ROA

The significant value stands at 0.0001 which is less than the set threshold of 0.05 for rejecting the null hypothesis hence we can reject the null hypothesis at 95% confidence level

ANOVA findings and the significance test conducted showed that there is correlation between the predictor variables number of agents, volume of loan repayment through agents and volume of cash deposits and the dependent variable ROA since significance is lower than 0.05

The findings showed that the relationship between number of agents and ROA is significant since $P < 0.05$ as a result reject the null hypothesis. The study found that the increase in number of agents is directly proportional to ROA.

The findings showed that the relationship between volume of loan repayments and ROA is significant since $P < 0.05$ as a result reject the null hypothesis. The study found that volume of loan repayments through agents affects ROA.

The finding showed that the relationship between volume of cash deposits and ROA is not significant since $P > 0.05$ as a result fail to reject the null hypothesis that there is no relationship between increase in volume of cash deposits transactions done by agents and ROA. This implies that cash is a non earning asset and does not necessarily influence variation in ROA.

C. CONCLUSION

The research focused on effects of agency banking on financial performance measured by ROA. The study concludes that Number of agents, volume of cash deposits and Volume of loan repayment through agents all combined affects ROA.

Key financial institutions have embarked on an aggressive entry into the agency segment and thus there is need to consider security measures. The study carried showed that the number of agents operated and volume of loan repayment through agents are directly correlated with the bank financial performance as measured by ROA

D. RECOMMENDATIONS

Since increase in number of agents affect ROA it is recommended that commercial banks should increase commission payable to agents as a motivator for them to market the agency services. It is recommended that the remaining banks should endeavor to get the license to operate agency banking so as to increase the number of agents.

As per the findings of this study Volume of loan repayment through agents affects ROA. It is recommended that agency banking services should include all the core activities of the bank

As per the finding of this study volume of cash deposits through agents does not affect ROA. The dependent variable ROA was used as a measure of financial performance. It is recommended that other indicators like ROE or ROCE should be used since it might generate a different outcome of the study

E. AREAS OF FURTHER RESEARCH

The following areas should be studied by other scholars and researchers. The first area is the security threats on agents and potential risks associated with agency banking. Also assessing other social factors affecting the adoption of agency banking

Finally, a study need to be undertaken on agency banking and greater financial inclusivity. The kind of services offered by agents does not include all the core activities of the bank.

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