

THE ROLE OF AGENCY BANKING IN GROWTH OF BANKING SECTOR IN KENYA: A SURVEY OF BANK AGENTS IN NAIROBI COUNTY, KENYA

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Abstract

The rural areas and slums face the challenge of accessing the services offered through conventional mortar and brick banking. Hitherto, it remained largely unclear the extent to which agency banking had impacted on growth of banking sector in Kenya. Due to the foregoing it was important to evaluate the influence of agent banking on banking sector's growth. The study specifically analyzed the effect of economies of scale and financial services accessibility on banking sector's growth. The study was carried out amongst bank agents across Nairobi County. A descriptive survey research design was adopted. A total of 1076 bank agents were targeted. Stratified random sampling method was employed to obtain a sample of 66 respondents. The study used structured questionnaires to collect data. The research instrument was pilot tested in order to determine its validity and reliability. Data analysis adopted both descriptive and inferential statistics using SPSS. The study revealed that economies of scale and financial services accessibility positively influenced growth of the banking sector. Economies of scale were the most important to growth of banking sector. The study concluded that agency banking is very relevant to enhancing growth of the sector. Therefore, the study recommended that banks should exploit economies of scale brought about by agency banking.

Keywords: Agency Banking, Bank Agents, Banking Sector, Economies of Scale, Financial Services Accessibility, Growth

INTRODUCTION

The economic development of countries is partly attributed to the extent of financial inclusion amongst the citizenry. There are a number of strategies that financial institutions have embraced to enhance financial inclusion; agency banking is presumably one of them. It is thus important to examine the various attributes of agency banking and how they influence financial inclusion. According to the Alliance for Financial Inclusion (AFI, 2012), agency banking describes a banking model where banks provide services through non-bank agents, such as grocery stores, retail outlets, post offices, pharmacies, or lottery outlets. This model allows banks to expand services into areas where they do not have sufficient incentive or capacity to establish a formal branch. This is normally the case in rural and poor areas where a high percentage of people are unbanked. Agency banking is quickly becoming recognized as a viable strategy in many countries for extending formal financial services into poor and rural areas. In recent years, agent banking has been adopted and implemented with varying degrees of success by a number of developing countries, especially the Latin America.

Brazil is more often than not considered as the global pioneer of agency banking due to the fact that it was an early adopter of the model and over the years has developed a mature network of agent banks covering more than 99% of the country's municipalities. Other countries in Latin America that have followed suit include Peru 2005, Colombia 2006, Bolivia 2006, Ecuador 2008, Venezuela 2009, and Argentina 2009. Other countries that have adopted and utilized the agency banking model are Pakistan, Kenya, South Africa, Philippines, Uganda and India. The regulation, design and implementation of agent banking vary across countries. The differences are evidenced in the variety of services offered by agents, the types of businesses acting as agents, the types of financial institutions that work through agents and the business structures employed to manage them (AFI, 2012).

Agency banking was introduced in Kenya in 2010 according to OPM (2011). It is observed that the involvement of key stakeholders in implementation of agency banking cannot be understated (OPM, 2011). The stakeholders should be drawn from both the public and private sectors. The stakeholders should participate in rolling out of mobile financial services model. The OPM (2011) report further underscores the importance of prioritizing and coordinating the national financial inclusion agenda. It is asserted that Kenya engaged in discussion with the Alliance for Financial Inclusion (AFI) regarding support for strategic financial inclusions. Agency banking is a model that is aimed at enhancing financial inclusion by reaching out to millions of people in need of financial services.

According to bank supervision and annual report (2014), the banking sector in Kenya comprise of the 44 banking institutions, 9 microfinance banks, 2 credit reference bureaus, 87

foreign exchange bureaus, 8 representative offices of foreign banks, 13 money remittance providers and the central bank which is the regulatory authority. The report further documents that the sector has had an improved performance in the year 2014 recording an 18.5 percent growth in total net assets and 18.65 percent rise in customer deposits up from 2013. This has been ascribed to higher demand for credit in the year 2014 and increased deposit mobilization by the banks as a result of outreach and service networks to serve the under(un)served market. Other notable development in the sector include the introduction of Kenya banks' reference rate aimed at increasing the transparency of credit pricing by commercial banks, the coming into force of the microfinance amendment Act of 2013 that permits the institutions to operate current accounts, issue third parties checks and engage in forex trading, among others. In the first quarter of the year 2015, it was observed that the sector has improved performance in terms of the net assets, loans and advances, profitability and deposit base (Banking sector performance and development report, 2015). It is envisioned that the sector would remain stable and resilient as the banks explore new opportunities locally and beyond.

Statement of the Problem

Many commercial banks are located in urban and peri-urban areas of Kenya. This implies that the rural areas and slums face the challenge of accessing the services offered through conventional mortar and brick banking. Globally, it has been postulated that albeit the emphasis financial access has received in theory, empirical evidence that acts as a nexus between broader access and development outcomes has been very limited (World Bank, 2006). The growth of the banking sector has a very close nexus with financial inclusion. It is asserted that financial inclusion describes broad access to financial services. Yet, there exists a conflict when this is viewed from either customers' or financial institutions' perspectives. Inclusion implies that financial services need to be available when and where desired, and products need to be tailored to specific needs. However, efforts to enhance inclusion should make business sense, translate into profits and financial growth for the service providers, and thus have a lasting effect. It remains unclear the extent to which agency banking has impacted on growth of the banking sector in Kenya. Due to the foregoing it was important to evaluate the influence of agency banking on the growth of the banking sector.

General Objective

To determine the role of agency banking in the growth of banking sector in Nairobi County, Kenya.

Specific Objectives

- i. To analyze the effect of economies of scale on the growth of banking sector in Nairobi County.
- ii. To assess the effect of financial services accessibility on the growth of banking sector in Nairobi County.

Research Hypotheses

H₀₁: The relationship between economies of scale and the growth of banking sector in Nairobi County is not significant.

H₀₂: The relationship between financial services accessibility the growth of banking sector in Nairobi County is not significant.

THEORETICAL FRAMEWORK

The study puts into perspective theories and models that are relevant to agency banking and growth of the banking sector. The study reviews financial intermediation theory, social cognitive theory, and agency theory.

Financial Intermediation Theory

The theory advocates that financial intermediaries play a fundamental role in growth process by transferring financial resources from savers to borrowers (Bakang, 2015). Financial intermediation essentially involves surplus units depositing funds with financial intermediaries who advance the same to the deficit units (Julie, 2013). In other words, by pooling funds in form of savings from net savers, the financial intermediaries are able to allocate funds to borrowers at a given interest rate margin. The financial intermediaries exist as a result of market imperfections. These financial intermediaries, mainly banks, microfinance institutions, savings and credit co-operatives among others offer an array of financial products and services to their different categories of clients.

According to Scholtens and Van Wensveen (2003), financial intermediaries create a number of specialized financial commodities for their clients where the institutions can sell the products and services for prices that cover production, direct and opportunity costs. In the context of financial inclusion, financial intermediaries particularly microfinance banks can provide accessibility to financial services by offering tailor made products and services such as microcredit, group lending to the undeserved, unbanked and the low income populace who are excluded by traditional banks and therefore enhancing financial inclusion.

Social Cognitive Theory

The theory explains how people acquire and maintain certain behaviour pattern and also provides the basis for intervention strategies (Bandura, 1997). The author argues that behavioural change is influenced by environment, people and behaviour. The three elements interact to form a behavioural change such as adoption and use of a certain system (Glanz, Rimmer & Lewis, 2002). In addition, it is observed that the behavioural change to adopt and use a given system is also influenced by a persons' observational learning, mastery, knowledge and skill to perform a given behaviour and the perform self-efficacy, that is confidence to perform given behaviour. The theory has been extended to focus on technological applications since a person's social interactions will result to change. Ratten (2011) adds entrepreneurial orientation as an influencer to intention to adopt a given system and notes that social environment impact can dictate the adoption of agency banking.

Social cognitive theory also referred to as social learning theory can therefore be used to understand the change in behaviour of persons as a result of the internal and external factors which are antecedents to a person adopting mobile banking. For instance, the aspect of media advertising on the ease of use of mobile banking can influence the adoption of mobile banking since advertising is a major external environment influencer. Ratten (2011) reiterates that advertising is important in learning and use of technology like mobile banking. In addition, it is noted that a person's degree of entrepreneurialism will drive them to adopt such technology as agency banking.

The agency theory was advanced by Jensen and Meckling (1976). It examines the conflict between shareholders and managers; the latter are agents of shareholders. This theory outlines the relationship between the principal and the agent whereby the latter is entrusted to run the interests of the former mostly at a predetermined monetary consideration or otherwise. It is asserted that since managers are compensated on the basis of accounting profits, it increases the incentives to manipulate information and/or favour projects with NPV if they provide immediate profits (Dogan & Smyth, 2002). The foregoing is argued to have negative consequences of potential loss in firm's value (Jensen & Meckling, 2001).

Standard agency theory has it that, *ceteris paribus*, the choice of a privately optimal ownership structure involves a trade-off between risk and incentive efficiency. The theory further states that larger owners are more likely to have a stronger incentive to monitor managers and also more power to enforce their interests which is bound to enhance the tendency of managers to maximize shareholder value. Contextualizing the same to agency banking, large commercial banks such as the Equity Bank and KCB are better placed to realize greater benefits from the agency banking model than smaller banks (Shleifer & Vishny, 1997).

Agency theory further presumes that managerial discretion is negatively associated to firm performance if and when managers employ their discretion to pursue their own selfish interests (Chang & Wong, 2003). The authors, moreover, argue that strategic management of managerial discretion depends largely on a comparison of the objectives of controlling shareholders and those of managers. The bank agents essentially are, as their title suggests, the agents in the principal-agent relationship and are tasked with advancing the interests of commercial banks (principals) at a commission. In agency banking, the principals have a greater say and huge control over the agents in that all the agents' operations are absolutely determined by the management of commercial banks.

EMPIRICAL REVIEW

The studies on agency banking and growth of the banking sector are reviewed in this section. Agency banking studies are reviewed under the sub-themes of economies of scale and financial services accessibility.

Economies of Scale

Li et al. (1999) conducted a study on commercial banks. They noted that large banks just like large firms do enjoy economies of scale. They further stated that big organizations benefit from economies of scale and scope. In other words, there is a tendency of better performance amongst large firms, *ceteris paribus*. A study on branchless banking in Colombia (Lozano & Mandrile, 2010) indicated that one way of bank agents to break even and eventually be profitable is through increment of transactions volume. Increasing the number of daily transactions per agent on economies of density (reaching as many customers as possible) and economies of scope (offering as many services as possible) is the most promising strategy. In Colombia, microfinance institutions (MFIs) act as bank agents and in order for agency banking to be profitable to them (given that they are entitled to commissions from commercial banks), they ought to enhance the attributes of economies of scale (Mas, 2009).

Another study noted that in Brazil, Caixa Economica Federal which is a commercial bank enhanced its economies of scale by partnering with more than 9,000 lottery outlets that offer agency banking. The firm had a total of 64,000 agents by the end of 2000 which implies that by then it enjoyed huge economies of scale (Oxford Policy Management, 2011). A report by Central Bank of Kenya indicated that, in Kenya, there are strict parameters on the size or frequency of transactions by a bank agent and a maximum daily balance that may be held by an agent (CBK, 2010). The bank agents are entitled to a commission on every transaction they carry out. Interpretatively, the more transactions they make, the higher their gains and the

reverse is true. From the banks' perspective, they are bound to benefit from the transactions made by their agents. Therefore, according to the report, the more the number of bank agents the greater the likelihood of the bank making more transactions through its agents and ultimately its performance will be enhanced.

Financial Services Accessibility

The trend in the financial services industry has been to gradually replace over-the-counter banking with new electronic delivery channels (Yu & Guo, 2008). Banks have therefore embraced e-banking in order to make banking easier for customers and to offer new services hence reducing the need for customers to visit bank offices (Hernandez-Murillo, Llobert & Fuentes, 2012). A study by Yu and Guo (2008) illustrated that adopting e-banking not only helps customers enjoy accessible banking services but also better business terms such as lower transaction costs, reliable service quality and time saving. Skvarciany (2014) noted that improving price, quality of bank services and accessibility had a positive relationship on satisfaction of small and medium enterprises with commercial banks in Lithuania. More so, the author suggested that improving quality and accessibility to banking services in relation to the customer needs would further enhance satisfaction with the small and medium enterprises.

In their paper on the challenge of creating an inclusive financial sector, Arora and Ferrand (2007) acknowledge the adoption of technology in banking systems in the provision and access of financial services especially to the unbanked community. However, Owens (2006) posits that the technology systems are susceptible to data and network risks therefore creating uncertainty in not only conducting financial transactions but also accessing financial services. Pande, Cole, Sivasankaran, Bastian and Durlacher (2012) assert that providing access to financial services through formal banking services coupled with exploiting economies of scale are able to remove market imperfections and facilitate financial inclusion even to the poor. Their study on whether access to formal banking services raise poor peoples' income in developing of India and Asia revealed that indeed access to formal banking services was not only crucial in improving poor peoples' savings and accumulating assets but also raised their incomes.

According to a study conducted in Cameroon, Talla (2013) noted limited access to financial services for small and medium enterprises. It was against this backdrop that banks strived to form closer ties with those working in the informal sector and rural areas to improve access to financial services. In yet another study, Honohan and King (2009) suggested that individuals in urban areas were able to access formal financial services in several African countries under study. The author ascribed the aforementioned with mainly financial sector

knowledge and trust with the financial institutions which are essential links in access to financial services.

A study by Demirguc-kunt and Klapper (2012) noted lots of documentation required by financial institutions in Sub-Saharan Africa was a major impediment in the access of financial services especially to the poor. In concurrence, World Bank (2006) found that a great proportion of Africans face difficulties in accessing formal financial services due to the high minimum balances and monthly charges demanded by the financial institutions. However, with the advancement of technology and innovation, transaction costs have been tremendously reduced and this has improved access to banking and financial services especially in South Africa (World Bank, 2006).

There has been remarkable progress in the access to financial services in Kenya (Rosen, 2013). It is further posited that the establishment of bank branches coupled with branchless banking in the idea of mobile and agency banking has transformed the financial environment and access to financial services in Kenya. A study conducted by Allen et al (2011) indicated that Equity bank has been one of the leading commercial banks that take closer access to financial and banking services to the unbanked and the rural poor through mobile branch establishment, mobile and agency banking and tailor made financial services. Notably, it has increased financial deepening and financial inclusion. The above findings were echoed by Mutua (2013) where it was found that mobile banking enables accessibility of banking services in Kenya.

A study on the innovative factors that affect financial inclusion in the banking industry in Kenya found that the new channels of distribution such as agency banking, e-banking and mobile banking were underutilized (Wambua & Datche, 2013). As such, the authors found that customers in the rural areas could not access banking services. Therefore, it was suggested that the non-accessibility of banking services could be an impediment to financial inclusion. However, the study failed to explicitly explain the influence of bank services accessibility and financial inclusion. Johnson and Zarazua (2009) corroborated that the access to formal financial services in Kenya was inclined to employment and literacy level of the populace in relation to the services offered by financial institution. Mwando (2013) on the other hand documented that access to financial services in Kenya was pegged to agency banking.

Growth of Banking Sector

It is acknowledged that a sound and effective banking system is vital for the health of an economy (Khanna & Kaushal, 2013). The authors looked into the growth of the banking sector in India focusing on the operations. In their paper, it was noted that the banking sector in the

country has experienced continuous growth and working efficiently in offering facilities, products and services in the country. Zhao, Casu and Ferrari (2008) empirical study indicated that the sustained productivity growth of the Indian banking industry was as a result of competition, technological innovations and progress. It is also suggested that growth of banking sector is fuelled by mergers especially for small and local banks in a bid to expand their horizons (Goyal & Joshi, 2011).

In another study, Shahid, Saeed and Tirmizi (2015) empirically analyzed the financial and economic development in Pakistan with special focus on the banking sector. The study employed time series data of Pakistani banks from 1980 to 2012. The bank deposit liabilities, domestic credit to private sector and broad money measured financial development contributed by the banking sector. It was noted that indeed financial development had a positive and statistically significant relationship with economic growth. The authors emphasized on the need of a robust banking sector to ensure sustainable economic development.

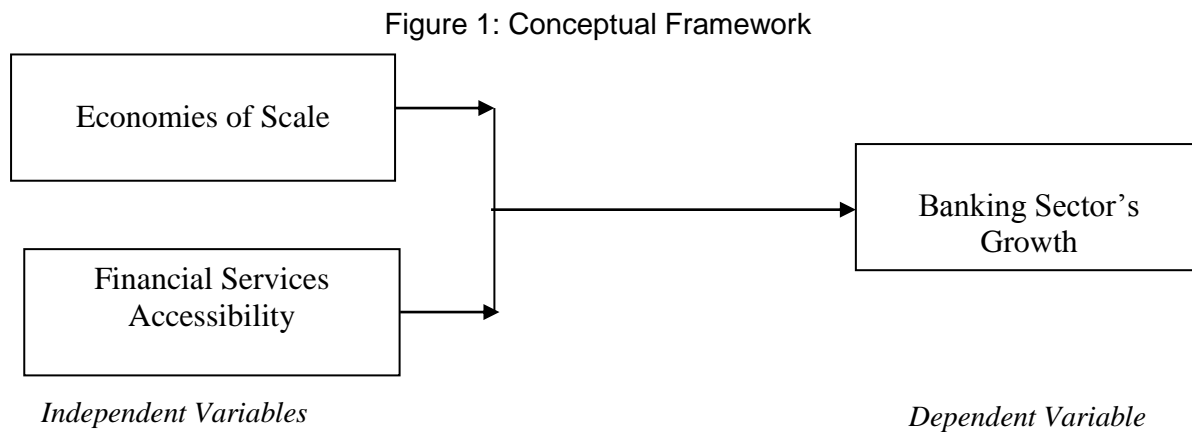
While investigating the influence of financial development on economic growth in Malawi, Simwaka, Munthali, Chiumia and Kabango (2012) noted that the financial sector in the country mainly dominated by commercial banks is poorly developed. The authors further noted that enhancing financial sector through expansion of financial system could spur up development of economic growth. In another study, Sibindi and Bimha (2014) embarked on banking sector development and economic growth in Zimbabwe. He noted a long run relationship between economic growth and banking sector development. In the study, it was also noted that the Zimbabwean banking sector had recorded a steady growth following deregulation of the sector and reforms in 1991. It was concluded that economic growth can catalyse banking sector development in Zimbabwe.

In Kenya, Onuonga (2014) empirically examined the nexus between financial development and economic growth over the period 1980 to 2011. The author noted that the development of financial sector had a significant positive effect on the growth of the economy. More so, in the study it was noted that the banking sector has been growing over time especially with the introduction of mobile banking, expansion of deposit taking microfinance sub-sector and the set up of credit reference bureaus among other developments. The author underlined the importance of a robust financial sector in accelerating economic growth.

Conceptual Framework

As shown in the framework, there is a set of two independent variables namely economies of scale and financial services accessibility. Banking sector growth is the dependent variable. It is

hypothesized that the independent variables are related to growth of the banking sector; a proposition that partly guided the study.



METHODOLOGY

Research Design

The study employed the most appropriate roadmap of conducting the research. To this effect, a descriptive survey research design was adopted. According to Kothari (2008), such a design is important when the study is interested in researching on the phenomenon as it is. The study was a survey in that participants were drawn from an array of bank agents and also due to the fact the study was carried over a specific period of time.

Target Population

The target population describes the aggregate of individuals sharing common characteristics in respect to a given study (Kothari, 2004). To this end, bank agents operating in Nairobi County were the focus of the study. This is underscored by the reasoning that these agents were privy to information regarding agent banking. There were a total of 1076 bank agents in Nairobi County when the study was carried out.

Sampling Frame

A sampling frame outlines a list of all members of the target population. In the context of the present study, the sampling frame captures all the bank agents operating in Nairobi as shown in Table 1.

Table 1: Sampling Frame

	Bank Name	Name of Agency	Bank Agents
1	Equity Bank	Equity Agent	526
3	Co-operative Bank	Co-op Jirani	124
5	Diamond Trust	DTB Mlangoni	49
6	Post Bank	Post Bank Mashinani	64
2	Family Bank	Family Pesa Pap	113
4	Kenya Commercial Bank	KCB Mtahani	157
7	National Bank	National Agent	43
Total			1,076

Sample Size Determination

The size of the sample was scientifically determined using the Nassiuma's (2008) formula as outlined below.

$$n = \frac{NC^2}{C^2 + (N - 1) e^2}$$

Where: n, N, C, e represent the sample size, the population, the coefficient of variation ($21\% \leq C \leq 30\%$), and the precision level ($2\% \leq e \leq 5\%$) respectively. The formula was used to calculate the sample as shown

$$n = \frac{1076 \times 0.25^2}{0.25^2 + (1076 - 1) 0.03^2}$$

$$n = 65.29$$

$$n = 66 \text{ respondents}$$

Sampling Technique

In order to ensure that there was no representation or sampling bias, simple random sampling method which is part of probability sampling techniques was adopted. The method was chosen due to the fact that all bank agents exhibit similar characteristics especially in terms of their knowledge regarding agent banking. This method ensured that all bank agents operating in Nairobi County had an equal opportunity of participating in the study.

Research Instrument

The study used a set of structured questionnaires which were self-designed to collect data from the sampled respondents. According to Mugenda and Mugenda (2009), questionnaires are the most appropriate tools for collecting primary data in survey studies due to the relatively large number of respondents who are also dispersed. The questionnaires were organized in such a way that they facilitated collection of data that were in tandem with the study objectives.

Pilot Testing

The research instrument (questionnaire) was pilot tested in order to determine its degree of validity and reliability. The pilot study was carried out amongst a few bank agents operating in Nairobi County. The participants in this study were duly excluded from the main study.

Validity of the Research Instrument

A valid instrument is said to measure what it purports to measure (Kimberlin & Winterstein, 2008). The research instrument was subjected to both content and construct validity tests. Content validity was determined through consultation with study supervisors who were deemed to be experts in both research and finance fields. On the other hand, construct validity was tested using Principal Axis Factoring (PAF) method where the validity threshold was Eigen value greater than 1.0. The factors under each study construct were ensured that they returned Eigen values greater than 1.

Reliability of the Research Instrument

A reliable instrument produces consistent results when administered to different samples of the same target population or population with similar characteristics. The reliability of the questionnaire was tested using the Cronbach alpha where the reliability threshold was alpha equal to or greater than 0.7. Table 2 demonstrates the results of the reliability test.

Table 2: Results of the Reliability Test

Variable	Test Items	Alpha Values
Economies of scale	6	0.84
Financial services accessibility	7	0.79
Growth of banking sector	5	0.82

Data Collection Procedure

Prior to data collection and after validation of the research instrument, requisite consents were obtained from the relevant authorities.

The researcher obtained a formal letter of introduction from Jomo Kenyatta University of Agriculture and Technology. This was followed by sourcing of relevant consent from the management of all the targeted commercial banks. The questionnaires were administered on the sampled respondents through the banks' respective human resource departments. The filled questionnaires were obtained through the same department after a period mutually agreed on by both parties.

Data Analysis Approach

The collected data were first cleaned in order to get rid of incomplete and/or inappropriately filled questionnaires. The process of data analysis was facilitated by the use of the Statistical Package for Social Sciences (SPSS) version 21 software. Data analysis adopted both descriptive and inferential statistics. Descriptive statistics were in form of frequencies, percentages, means, and standard deviations. On the other hand, correlation and multiple regression analysis represented inferential statistics. The study findings were presented in form of statistical tables. The research hypotheses were tested at 0.05 level of significance (95% confidence level). The following regression function was employed in analysis.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \text{ Where:}$$

Y	=	Growth of Banking Sector
β_0	=	Constant
X_1	=	Economies of Scale
X_2	=	Accessibility to Financial Services
ε	=	ErrorTerm
β_1, β_2	=	Regression Coefficients

FINDINGS AND DISCUSSIONS

Response Rate

66 questionnaires were issued to each of the sampled bank agents (respondents). After collecting the filled questionnaires, it was noted that a total of 51 had been filled according to the instructions. The foregoing represented 77.3% response rate.

Descriptive Findings and Discussions

Economies of Scale

The study assessed the opinions of the respondents in regards to economies of scale attributed to agency banking. Table 3 illustrates their views on the theme.

Table 3: Descriptive Statistics for Economies of Scale

	n	Min	Max	Mean	Std. Dev
I realize many bank transactions on a daily basis	51	1	5	3.98	1.010
Most customers make huge cash deposits through agency banking	51	1	5	4.12	.973
Many customers withdraw small amounts of money through bank agents	51	2	5	4.14	.960
There are several bank agents in our locality	51	2	5	4.20	.775
I serve different banks as their agent	51	2	5	4.20	.775
Many people make payments through bank agents	51	1	5	3.98	1.086

Respondents agreed (mean ≈ 4.00 , stddev ≈ 1.000) that they realize many bank transactions on a daily basis; many customers withdraw small amounts of money through bank agents; most customers make huge cash deposits through agency banking and that there were several bank agents in their locality. It was further agreed (mean ≈ 4.00 , stddev ≈ 1.000) that they serve different banks as their agent and that many people make payments through bank agents.

Financial Services Accessibility

The views regarding financial services accessibility by customers were also sought. The pertinent findings are indicated in Table 4. in regard to the construct.

Table 4: Descriptive Statistics for Financial Services Accessibility

	n	Min	Max	Mean	Std. Dev
I serve many bank customers	51	4	5	4.45	.503
I facilitate cash withdrawals to bank customers	51	4	5	4.49	.505
I facilitate cash deposits to bank customers	51	4	5	4.43	.500
Adoption of agency banking by customers has been rising over the past one year	51	4	5	4.41	.497
Many people prefer using agency banking services to visiting the bank	51	1	5	4.27	.666
Many banking services are offered on agency banking platform	51	4	5	4.31	.469
There are some banking services that are not offered on agency banking platform	51	4	5	4.25	.440

Further, the study established that respondents were in agreement (mean >4.00 ; stddev <1.000) that they serve many bank customers and they facilitate cash withdrawals and deposits to bank customers. They also ascertained that adoption of agency banking by customers has been rising over the past one year and that many people prefer using agency banking services to visiting the bank. Respondents further admitted that many banking services were offered on agency banking platform and that there were some banking services not offered on agency banking platform.

Growth of Banking Sector

Lastly, the respondents' opinions in respect to growth of the banking sector as a result of agency banking were analyzed. The outcomes of the analysis are displayed in Table 5.

Table 5: Descriptive Statistics for Growth of Banking Sector

	n	Min	Max	Mean	Std. Dev
The bank that I serve as an agent has a large customer base compared to its competitors	51	3	5	4.02	.374
Banks have recorded increased revenue since adoption of agency banking	51	2	5	3.90	.539
Banks have increased the number of services offered to customers since introduction of agency banking	51	2	5	3.76	.651
Many people are now able to access banking services through bank agents hence growth of banking sector	51	2	5	4.02	.424
Many accounts have been opened through agency banking platform which translates to growth of banking sector	51	2	5	3.96	.344

The findings illustrated that respondents concurred (mean \approx 4.00; stddev < 1.000) with the argument that the bank that they serve as an agent has a large customer base compared to its competitors; banks have recorded increased revenue since adoption of agency banking; banks have increased the number of services offered to customers since introduction of agency banking; many people are now able to access banking services through bank agents hence growth of banking sector; many accounts have been opened through agency banking platform which translates to growth of banking sector.

Inferential Findings and Discussions

Relationship between Economies of Scale and Growth of Banking Sector

The study determined the existing relationship between economies of scale and growth of banking sector. Table 6 indicates the results.

Table 6: Relationship between Economies of Scale and Growth of Banking Sector

		Growth of Banking Sector
Economies of Scale	Pearson Correlation	.442**
	Sig. (2-tailed)	.001
	n	51

** . Correlation is significant at the 0.01 level (2-tailed).

The results indicated a moderately strong positive and statistically significant relationship between economies of scale and growth of banking sector at 0.01 significant level ($r = 0.442$; $p < 0.01$). This indicated that economies of scale positively influenced growth of banking sector. It further implied that due to the large number of transactions, large deposits that can be handled

through agency banking and existence of a number of bank agents, banks were able to expand their customer base and increase deposits. These resulted to growth.

Relationship between Financial Services Accessibility and Growth of Banking Sector

In addition, the relationship between the two study constructs was examined. The results of correlation analysis are presented in Table 7.

Table 7: Relationship between Financial Services Accessibility and Growth of Banking Sector

		Growth of Banking Sector
Financial Services Accessibility	Pearson Correlation	.663**
	Sig. (2-tailed)	.000
	n	51

** . Correlation is significant at the 0.01 level (2-tailed).

It was ascertained that financial services accessibility and growth of banking sector exhibited a strong, positive and statistically significant relationship ($r = 0.663$; $p < 0.01$). Therefore access to financial services positively influenced growth of the sector. Agency banking is more accessible and convenient than visiting banking halls for services, the results therefore implied that financial services accessibility is indeed fundamental for growth of the banking sector. This is because of the large number of customers that can be served through the service.

Effect of Agency Banking on Growth of Banking Sector

The study further examined the extent to which agency banking affected the growth of the banking sector in Nairobi County. The results of the relevant analyses (coefficient of determination, ANOVA, and regression) are as shown in the tables below.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792 ^a	.628	.595	.21860

a. Predictors: (Constant), Economies of Scale, Financial Services Accessibility

As shown in Table 8, the correlation between agency banking (as conceptualized by economies of scale and financial services accessibility) and growth of the banking sector was positive and strong ($R = 0.792$). The coefficient of determination ($r^2 = 0.595$) indicated that 59.5% of the

banking sector growth could be explained by agency banking. The results underpinned the importance of the role played by agency banking in enhancing the growth of the sector.

Table 9: ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.708	4	.927	19.399	.000 ^a
	Residual	2.198	46	.048		
	Total	5.906	50			

a. Predictors: (Constant), Economies of Scale, Financial Services accessibility

b. Dependent Variable: Growth of Banking Sector

Table 9 which shows the findings of the analysis of variance indicates that agency banking as depicted by economies of scale and financial services accessibility had a significant effect on the growth of the banking sector ($F = 19.399$; $p < 0.01$). The results further reinforced the importance of the role played by agency banking in enhancing the growth of commercial banks in Nairobi County, Kenya.

Table 10: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.305	.887		1.471	.148
	Economies of Scale	.254	.060	.393	4.270	.000
	Financial Services Accessibility	.557	.132	.458	4.231	.000

a. Dependent Variable: Growth of Banking sector

Table 10 shows the results of multiple regression analysis that was guided by the model:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ where Y , X_1 and X_2 represent growth of banking sector, economies of scale and financial services accessibility respectively; ε is the error term while beta values represent regression coefficients.

Therefore, Growth of Banking Sector = $1.305 + 0.254$ Economies of Scale + 0.557 Financial Services Accessibility

The findings implied that the growth of the banking sector could be determined by 0.254 economies of scale and 0.557 financial services. Moreover, the results of the regression analysis enabled addressing of the research hypotheses. As indicated by the p-values, the first ($t = 4.270$; $p < 0.05$) and second ($t = 4.231$; $p < 0.05$) null hypotheses were rejected. The

findings implied that economies of scale was the most fundamental aspect of agency banking relative to enhancing growth of the banking sector.

SUMMARY

It was agreed that there were several bank agents in respondents' locality and they realized many bank transactions on a daily basis. Further, it was noted that many customers make huge cash deposits but withdraw small amounts of money through bank agents. It was also agreed that respondents serve different banks as their agent and that many people make payments through bank agents. The relationship between economies of scale and growth of banking sector was moderately strong, positive and statistically significant at 0.01 significant level ($r = 0.442$; $p < 0.01$). The findings reinforced the observations made by OPM (2011) that the more the number of bank agents the greater the likelihood of the bank making more transactions through its agents and ultimately its performance will be enhanced. The findings also supported the argument that bank agents ought to enhance the attributes of economies of scale since they are entitled to commissions from commercial banks (Mas, 2009).

Respondents were in agreement that they serve many bank customers and they facilitate cash withdrawals and deposits to bank customers. They also ascertained that adoption of agency banking by customers has been rising over the past one year and that many people prefer using agency banking services to visiting the bank. Respondents further admitted that many banking services were offered on agency banking platform and that there were some banking services not offered on agency banking platform. Correlation analysis indicated a strong, positive and statistically significant relationship ($r = 0.663$; $p < 0.01$) between financial services accessibility and growth of banking sector. The findings of this study are in tandem with the findings of a study carried out by Rozen (2013). Rozen's study indicated that the establishment of bank branches coupled with branchless banking in the idea of mobile and agency banking has transformed the financial environment and access to financial services in Kenya.

In respect to this construct, respondents were in concurred that the bank that they serve as an agent had a large customer base compared to its competitors. They further ascertained that banks have increased the number of services offered to customers since introduction of agency banking and have recorded increased revenue since adoption of agency banking. Moreover, it was noted that many accounts have been opened through agency banking platform and also many people were able to access banking services through bank agents hence growth of banking sector. The growth of the banking sector was found to be largely influenced by agency banking. More so, market coverage as one of the aspects of agency banking was found

to have the least implication on the foregoing growth as opposed to economies of scale which was revealed to be the most important element of agency banking in determination of banking sector growth.

CONCLUSION AND RECOMMENDATIONS

The study concluded that there were several banks agents and they served different banks. As such, they realized huge bank transactions including deposits, withdrawals and effecting payments. The study further concluded that economies of scale enjoyed through agency banking was crucially important in enhancing growth of the banking sector. It was inferred that the use of agency banking has been on the rise and was preferred by many people. As much as it offered an array of services, it was noted that there were some of the banking services that were not offered. It was therefore concluded that financial services accessibility was significant and fundamental for the growth of banking sector. It was concluded that agency banking played a very crucial part in enhancement of the growth of the banking sector. In addition, it was deduced that agency banking was associated with economies of scale, that is, the commercial banks were in a position of making massive number of transactions through its bank agents. This consequently enhanced their growth.

The study recommended that commercial banks ought to further exploit the economies of scale enjoyed through agency banking to enhance their growth and hence the growth of banking sector. In addition, to further enhance growth of the banking sector, it is recommended that banks improve the accessibility of financial services by increasing their market coverage.

LIMITATIONS AND FURTHER STUDIES

The study faced a number of constraints. Nairobi County is home to very many bank agents. This was a challenge not only in devising the best method of sampling them but also in accessing them. Regarding this challenge, simple random sampling technique was employed in order to minimize sampling bias as much as possible. The research instrument was limited to close-ended questions which might have failed to capture open opinions of bank agents. To address this challenge, it was ensured that the data collected using the instrument was as objective and comprehensive as possible.

The study suggests areas that ought to be investigated in respect to agency banking and growth of banking sector in Kenya. The themes suggested include the role of agency banking in financial services accessibility; the role of agency banking in financial inclusion in Kenya; Analysis of challenges affecting agency banking in Kenya amongst others.

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