CUSTOMERS' PERCEPTION OF AGENCY BANKING IN KENYA: CASE STUDY OF EQUITY BANK KENYA LIMITED

Charles Gitonga Ndungu & Wario Guyo Wako
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

Abstract

One of the reasons why agency banking has a high appeal among the retail banks in Kenya is the expectation that it holds the key to decongesting banking halls which has been a teething problem among the banks. Recent studies in this field have shown that while agency banking has increased profitability of banks in Kenya it has not succeeded in decongesting the banking halls. This study was concerned with investigating the liquidity (float) adequacy of bank agents and how it shaped the perception of bank customers on agency banking and thus their decision whether to transact at an agent or at bank. The research was carried out through an e-mail administered questionnaire on 263 Equity Bank Kenya Limited agents' supervisors across the country. Simple random sampling was used to select the case study bank. Transactions values were classified into 10 classes each with a Kes, 5000 range, the lowest class being 0- 5,000 while the highest class was 45,001-50,000. G- Logit Model was used for inference. Upper limits of each class {(X) the independent variable} was regressed against the log of odd ratio of dichotomous dependent variable (Y) where positive perception was denoted as one (1) while negative perception was denoted as zero (0). Analysis of findings was both descriptive and inferential. Customers had positive perception of adequacy of agent float for transactions up to Kes 5,000. On average, for every increase of Kes 5000 in transaction size, the odd ration in favor of positive customers' perception for transactions above 5,000 reduced by 99.9% which was in line with the researcher's expectations as the average transaction value had been calculated as Kes 5,525. In conclusion agency banking was seen to have created an additional market segment to the banks which increased profitability of banks from increased deposits and transactions through deepening of financial inclusion. However the bank agency model could not decongest banking halls as customers and transactions also increased.

Key words: Float, Decongesting the banking halls, Positive perception, Negative perception. Dummy variable

1.0 Introduction

1.1 Background of the study

Agent-banking is an arrangement by which licensed institutions engage third parties to offer certain banking services on their behalf. In recent years, agent banking has been implemented with varying degrees of success by a number of developing countries, particularly in Latin America (Venkatesh and Morris, 2003). Other countries around the world have utilized the agent banking model to expand financial services, including Pakistan, Philippines, Kenya, South Africa and India. (Bloodgood, 2010). In Kenya, agency banking is governed by the Prudential Guidelines on Agent Banking issued by the Central Bank of Kenya (CBK) and which became operational on 1st May 2010. In February 2011, the Central Bank of Kenya released regulations allowing banks to offer services through third party agents approved by the CBK. Such agents can be telco outlets, SMEs, retail chains, savings and credit co-operatives (SACCOs), or even corner shops – the main qualifications are that it must be a profit-making entity that has been in business for at least 18 months and can afford a float account. The use of the agency banking model by banks has continued to improve access of banking services since its launch in 2010. As at 30th June 2014, 15 commercial banks had contracted 26,750 active agents facilitating more than 106 million transactions valued at Sh571,5 billion (US$ 6billion) (CBK, 2014). According to the Oxford policy management (2010), the agents make use of the mobile phone technology, payment cards and internet banking technology to connect to the server of the principal institution to carry out customer transactions. Serving the bottom of the pyramid with formal financial services is hard work. These people require as many if not more financial transactions than average bank customers, since their income is less predictable, they are often paid more frequently (daily or weekly) and their daily financial circumstances may be more easily overwhelmed by health or other shocks. Yet active cash flow management may not translate into longer-term financial accumulation, given the pressing consumption and investment needs they face. Thus, banking the bottom of the pyramid presents two major challenges for retail banks: devising a viable revenue model that is consistent with customers' cash flow needs and perceptions of value, and minimizing the infrastructure and operational burden of serving millions of small transactions. Concentrating low-value transactions at a limited number of branches is very costly for both banks and their customers. Banks have to invest large fixed costs in setting up and maintaining their branch network, and customers often have to incur significant time and cost to travel to distant branches. As a result, banks often stay away from poor or rural communities which they find too costly to serve, and poor people fall back on more local informal options to manage their finances. Banking beyond branches is about shifting the bulk of low-value transactions to a much lower-cost and more ubiquitous retail channel, which makes for a significantly more compelling business case to serve the bottom of the pyramid. The key is to leverage on corner shops that can be found in every village and in every neighborhood.

According to Mas and Mireya (2010), five reasons why banks should engage in agency banking include. 1. To decongest Branches: Crowded banking halls and long queues are a common part of customers' experience in developing

countries. Banks can offer a better service to their existing customers by allowing them to conduct basic transactions at a range of local shops. In this fashion, banks can offer more choice and convenience to their customers; they can make their branches more appealing for higher-end customers with more sophisticated needs; and they can reduce the average per-transaction cost by shifting low-value transactions (including over-the-counter bill pay transactions of non-customers) to a cheaper, variable cost channel. Today banks see transactions largely as a cost and operational burden, while most stores would like more transactions to increase foot traffic. It's a win-win for stores, banks and their customers. 2. Develop business in new locations: Signing up agents is a low-investment, low-risk way to test the waters in new geographic markets. It allows banks to acquire a customer base and transaction volume which, with time, may warrant the opening of a bank branch. 3. Create a transaction-based proposition targeting low income segments: In order to serve poor people profitably, it is not enough to move their transactions to a lower-cost channel, it is necessary to identify an appropriate revenue pool. Traditional bank pricing models are not very well suited for the low value transactions: they typically rely on interest margin, account maintenance fees or cross-selling credit. The low income people may not have a lot of money to save, but they have plenty of transactions to undertake: frequent small deposits building up to a savings objective, microloan installments and bills to pay, remittances among family and friends supporting each other. While today banks see such transactional needs mostly as a cost and in fact they often discourage additional transactions, these transactional needs could in fact drive substantial willingness to pay by these people. Per-transaction pricing can thus complement per-transaction agent commissions as a sustainable banking model for the bottom of pyramid customers. 4. Re-focus branches on selling rather than cash handling: A branch's main customer-facing role should be to sell to new customers and to propose new products to existing customers. Instead branches are often overwhelmed by a volume of cash transactions which leaves little room for a sales pitch when a customer (or non-customer) reaches the front of the line at the teller. By separating the service channel from the sales, banks may find their customer relationships significantly strengthened. Customers visiting branches could then be engaged in a conversation around their broader needs, giving them a fuller sense of the bank caring for their welfare. 5. Fill the competitive vacuum that others might otherwise fill: Mobile operators in many developing countries have identified a clear business opportunity offering store-of-value and payment services to their customers. Safaricom's success with M-PESA in Kenya has shown that mobile operators have the capacity to bring a compelling financial service to the mass market.

1.2 Statement of the problem.

In recent years, agent banking has been implemented with varying degrees of success by a number of developing countries, particularly in Latin America. (Venkatesh and Morris, 2003). Other countries around the world have utilized the agent banking model to expand financial services, including Pakistan, Philippines, Kenya, South Africa and India. (Bloodgood, 2010). Crowded banking halls and long queues are a common part of customers' experience in developing countries and one of the reasons why banks should resort to agency banking, is to decongest branches (Mas and Mireya, 2010). Banking agents help financial institutions to divert existing customers from crowded bank branches by providing a more often complementary and convenient channel of accessing bank services. (Kitaka, 2001).

In Kenya, Central Bank of Kenya continues to report impressive growth in numbers of bank agents, for instance their number had grown to reach 26,750 active agents as at end of June, 2014 (CBK, 2014). It is the author's argument that this number of agents, which is more than a hundred fold, the total number of bank branches in the country (CBK 2014), should be significant enough as to decongest the banking halls. According to Mwando (2013), agency banking has helped to spread reach of financial services which in turn has increased the profitability of commercial banks in Kenya. However, one thing agency banking has failed to do is to decongest banking halls. (Njuki, 2012). Equity Bank Kenya Limited, which had 165 branches and 17,523 agents as at March, 2015 was in May, 2014 forced to double its over the counter cash withdrawal charges (from Kes 50 to Kes 100) while retaining lower charges (of Kes 25 lower than ATM charges of Kes 30) at the agent outlets in an attempt to push customers from banking halls (EBL, 2014).

This clearly shows that despite the high number of bank agents and the relatively lower costs at the agency, customers continue seeking services in bank branches thereby frustrating the model's objective of decongesting banking halls. Questions can thus be raised as to how customers view the strategic agency banking model. The objective of this study therefore is to investigate the perceptions of customers about agency banking as a channel for service delivery and particularly the perception on adequacy of agents' liquidity/float.

1.3 Research question.

The study set to answer the question: How do customers perceive adequacy of bank agents float?

2.0 Literature Review

2.1 Introduction

Researchers need to identify and explain relevant relationship between the facts. In other word the researcher must produce a concept or build a theoretical structure that can explain facts and the relationship between them (Kothari, 2005). In writing a research proposal, a researcher is obligated to place the question or hypothesis in the context of previous work, in such a way that it explain and justifies the decision made. (Mutai, 2000) the proposal should explain how and why the research questions were formulated in the proposed form, and explain precisely why the proposed approach was adopted (locke et al., 1997)

2.2 Theoretical review

2.2.1 Agency theory

Agency theory in a formal sense originated in the early 1970s, but the concepts behind it have a long and varied history. Among the influences are property-rights theories, organization economics, contract law, and political philosophy. Some noteworthy scholars involved in agency theory's formative period in the 1970s included Armen

Alchian, Harold Demsetz, Michael Jensen, William Meckling, and S.A. Ross. Agency theory is developed as framework for analyzing conflicting interests between key stakeholders, in addition to the development of mechanisms for resolving conflicts (Tipuric, 2008). Besides prevalent contribution within discipline of corporate governance, agency theory application is extensive: agency theory may be applied in every situation in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory attempts to describe the relationship in terms of behavioral characteristics and provides mathematic instrument for evaluating situations between parties who lack mutual trust. Agency theory describes economic exchange relation between principal and agent. Principal-agent relation, in which principal delegates work to the agent, is described using the metaphor of a contract (Jensen & Meckling, 1976). Agency theory objective is to determine optimal contract between principal and agent. Agent (manager or employee) tries to maximize personal gains by sacrificing principal's economic objectives and agent's commitment level is function of perceived reward value for satisfying principal's objectives. In situation when principal delegates work to the agent, agency relationship develops. Agent's mission is to optimally accomplish principal's interests. In pursuit of the mission, the agent chooses way of doing business which results in certain effects. Principal bears a risk of eventual failure, but also adopts effects of agent's execution of mission for agreed payment to the agent. Level of reward to the agent usually depends on principal's interest in realization of the assigned mission. A benefit, to the agent, in the form of reward represents cost to the principal while agent's effort brings benefits to the principal (with an assumption that higher effort is directly related to better results), and at the same time cost to the agent (Eisenhardt, 1989). Relationship between principal and agent based on the contract is a focal point of agency theory. Principal wants to maximize his/her benefits while minimizing reward to the agent at the same time. On the other hand, the agent wants to maximize his/her benefits. Agency theory assumes that principal's wealth, per se, would not be maximized because agent and principal: (1) have different goals, (2) have different access to information (principal cannot monitor what agent does and know which information agent has, and (3) different propensity towards risk.

Proponents of agency theory state that control mechanisms are obligatory for directing opportunistic managerial behavior, although empirical researches confirm that control generates stronger individualistic behavior, reduces proactive organizational behavior and trustworthiness, and lastly results with distrust (Podrug, 2010). With agency banking rogue agents have been self serving at the expense of the bank and customers. They refuse transactions above certain limits to preserve their float, request customers to split transactions to maximize on per transaction commissions. Other agents have weak management system exposing bank to risks through their employees who become fraud conduits. The banks thus not only incur the cost of remunerating the agents but also cost of supervision by having Regional Managers and Area Supervisors. These controls can be seen as waste by the royal agents who act as steward representatives of banks but are necessary to guard against scoundrel agents due to information asymmetry where the principal cannot monitor what agent does and know which information agent has.

2.3 Independent variable

2.3.1 Agent float

This is the cash at hand and bank balances set aside by the agent for agent banking operations. According to CGAP (2011), the primary cost of the mobile money business for retail agents is liquidity management, which consumes 20-30% of the total expenses for this business line. In the Philippines, three out five retail agents are traveling to the bank more than 3 times per week (Jayo et al., 2012). Bank agents aggregate the cash needs of customers so that only the agent, and not the entire community, has to travel to a branch in order to service their account. Agents handle the logistics of local cash distribution, in effect bridging the distance between the bank branch and the places where customers live and work. The agent is paid a small commission per transaction served, making this a variable-cost transactional channel for the bank and at the same time a profitable new line of business for the agent (Mas and Mireya, 2010). The operation of the agency is such that a customer's deposit at the agent entails customer giving cash to the agent and the bank electronically accounts by debiting the agent's bank account and crediting the customer's account at the bank. It is therefore not possible for an agent to receive a deposit unless he/she has sufficient credit in the bank. A customer withdrawal at the agent involves the agent giving cash to the customer and the bank electronically settles the transaction by debiting the customer's bank account and crediting the agent's bank account. An agent must have funds in his/her bank account to receive a deposit from a customer while he/she requires cash in till in order to pay a withdrawing customer. An agent therefore has to have cash, both at bank and in till. This is a key challenge as most agents are not able to balance the cash holding or have inadequate capital for operation. Low capital/float increases the frequencies of agent visit to the bank for withdrawals to replenish their tills or for deposits to replenish their bank balances. This is a major cost to the agents arising from cost of commuting to the bank, time spent and the devastating reputation risk of having to turn away customers until the float is replenished. Banks need to incentivize the agents adequately in order to ensure that they maintain a proper level of liquidity at all times, visually protect the bank's brand presence within their outlets, actively promote the service with the public, and take the time to train customers unfamiliar with electronic transactions. (Mas and Mireya, 2010). If the bank has a transaction-based revenue model, customer transaction fees can be used to compensate the agents. Increased foot-traffic and branding advantages from this new line of business may help the agents, but it will still expect to be directly and sufficiently compensated for the service. According to Mars and Mireya (2010) as a rule of thumb and using round numbers, in order for the system to work on a modest per-transaction fee of Kes 20, a typical store in a Kenya might need some 50 transactions daily, producing daily revenue of Kes 1,000. This would cover one person's salary of Kes 200-300, the higher working capital requirements and risk associated with its liquidity holdings, and more frequent trips to the bank.

According to a survey on agency banking carried out by Kenya Bankers Association (KBA, 2012) for its Center for Research on Financial Markets and Policy, 40.9% of agents operations are cash deposits while 36% are withdrawals. The survey also revealed that customers are asking for additional services not on offer, including ATM cards, recommendations for a loan and advice on various bank products on offer. While these would offer a distinction from services offered by telcos' mobile money services, they require more expertise than agents have, and closer supervision

than they can be given. The survey also found that 91% of respondents will use an agency outlet because they trust the bank compared rather than the agent. Banks with positive images and long, stable operations are favored. Agents use point-of-sale (POS) devices and/or mobile phones and must have access to the bank's core banking system so that the clients' transactions are reflected in real time. In the same report cited above, CBK notes that various banks have already invested in new core banking systems. 'The new systems are expected to facilitate centralization of operations, staff rationalization and support new technological products such as internet and mobile banking. Agency banking has helped to bring some banking services to rural and suburban areas. The prohibitive costs of setting up branches and ATMs vis-à-vis the expected returns have been a disincentive for banks to roll out their services in these areas, but agency banking has provided an avenue to these markets at limited cost. Although some rural customers still have to travel some distance to branches for services that agents can't deliver, basic transactions are far more readily available. By its nature, the model was intended to take banking to the low income and rural populations. This places outlets in areas where insecurity is a concern. They lack the sophisticated security measures of the bank branch (CCTV, armed guards), large deposits (large here means over KES50, 000) are in some cases turned away. The outlets also operate beyond standard bank opening hours, further exacerbating the security risk. Other problems include: lack of consumer information on agency banking, for example on charges, lack of sufficient float, image problems (shabby shops may turn off customers); system collapse; equipment breakdown and incompetent agents. Despite the obstacles, agency banking is expected to gain in importance as banks roll out more products. Together with ATMs, mobile and internet banking, agent outlets may then leave bank branches to become customer care centers providing more complex transactions and services.

2.3.2 Dependent Variable

The study adopted an explanatory variable of customers' perception of adequacy of agents float. The responding agents' supervisors were required to rate customers' feed back as either positive or negative. Customers' perceptions to a large extent were expected to be shaped by the size of transaction values. Service quality arises from a comparison of the difference between service expectations developed before an encounter with banks and the performance perceptions gained from the service delivery based on the service quality dimensions (Berry *et al*. (1985), Zeithaml and Bitner (1996). Bindra, (2007) argues that a satisfied customer will tell one other customer about the experience but a customer who is not satisfied will tell a crowd. This is also the Pareto Principle that 80% of all complaints originate from 20% of the customers. If at all there is negative perception on adequacy of agents float, it must be from the small percent of misplaced customers who lack accurate information about agency capacity. Banks are to a large extent to blame for the information gap. Since the agency model is intended for the low income and the rural populations (KBA, 2012), (CGAP, (2011), the average transaction sizes were only considered for amounts between Kes 1 and Kes 50,000. Within this range of transaction size are the average transaction sizes at agent outlets (expected to be the lowest), at ATMs and at bank (expected to be the highest). To increase clarity and obtain helpful feed back through the questionnaire instrument, this range of transactions were divided in to 10 classes each with range of Kes 5,000.

2.3.3 Econometric Model

Relationship between the two variables was expected to follow econometric model:

Li = β₁ + β₂Xi +μi, Where;

$Li = \beta_1 + \beta_2 Xi + \mu i$, Where;

Li is the logarithm of odd ratio.

Odd ratio is the Probability **Yi** = 1 divided by probability **Yi** = 0 .i.e. **p/1-p.**

Yi is the explanatory response where Yi = 1 for positive perception and Yi = 0 for negative perception

β₁ is the slope

β₂ is the intercept

Xi is the value of independent variable and is assumed to influence the outcome Y.

μi is the error term.

3.0 Methodology

3.1. Sampling Method

The population of the study consisted of all the bank agents operating within the country. As at end of June, 2014 there were a total of 26, 750 bank agents working on behalf of 15 banks. (CBK, 2014). The sampling frame consisted of a list of commercial banks approved to engage in agency baking in Kenya. Each of the licensed banks was allocated a number from 1 to 15. The numbers were put on a ballot and number six representing Equity bank Kenya Limited was drawn as the case study. List of all Equity Bank Kenya Limited branches and contacts of all agent supervisors of the bank was obtained from Its head office Agency department. There were a total of 17,753 agents decentralized for service and supervision to 263 bank agents supervisors distributed across all of the 47 counties of Kenya. (EBKL, 2015). The agent supervisors were picked as the respondents as they in daily contact with both the agents and their customers and thus considered to have the average information from on average 80 agents per supervisor.

3.2. Data Collection and validity of data collection Instrument

The researcher used structured questionnaires administered on email as the main instruments for collecting primary data relating to the variables. According to Mugenda and Mugenda (1999) structured questionnaire facilitates the collection of information in a systematic and orderly manner as the questions are formulated in advance. The questionnaires were divided into sections with each section targeted to collect data on each of the variables. Pilot testing was done by administering face to a draft questionnaire to 5 agents' supervisors of Family Bank Ltd with minor amendments proposed and effected to arriving at the ultimate questionnaire used. Validity and reliability of research instruments ensure scientific usefulness of the findings arising from the study .Validity refers to the degree of success of an instrument in measuring what it is set out to measure so that differences in individual scores can be taken as

representing true references in the characteristics under study, Nachimias and Nachimias, (1996) ,also noted that validity is the extent to which instruments capture what they purport to measure. Oso and Onen(2005) ,noted that validity of instrument is critical in all forms of reserves and the acceptance level largely depends on logical reasoning experience and professionalism of the researcher who should have a good understanding of the various quality control techniques. The content validity was used in determining the validity of the instruments. In subjecting the tools to validation, the process first started by discussion with the supervisor of the study who scrutinized all the questions in the tools to assess their appropriateness in addressing critical issues in the study, secondly content validity was established through pilot testing where the responses of the subjects were checked against the objectives. A coefficient of at least 0.5 will imply that the instrument is valid, after computation a coefficient of 0.6 was obtained confirming that the instrument was valid.

3.3 Data Analysis

This is a process used to make sense of the data. Excel was used to analyze the quantitative data. Further, quantitative data was analyzed by use of descriptive and inferential statistics. Descriptive statistics such as mean, frequencies, standard deviation and percentages were used to profile sample characteristics and major patterns emerging from the data. Quantitative data was presented in tables and figures. The study also used content analysis to analyze qualitative data obtained from open ended questions. The data was then presented in a prose form. In the inferential statistics, the study used a Group Logit regression model. Logit analysis was used to determine the odd ratio of a customer transacting a given value of transaction perceiving agent float as adequate or not adequate (Positive or negative perception) This is a model of binomial response variables. Regression is a method of fitting a line to a data to compare the relationship between the log of odd ratio (lnli) of a binomial variable (Y) against independent variable (X). A binomial response variable refers to a response variable with only two outcomes and is represented by econometric model;

4.0 Results and Discussions

4.1Introduction

This chapter presents the findings and discussions of the survey carried out on agent supervisors Findings have been presented in two parts, Part A and Part B. The earlier dealing on descriptive findings whiles the later concentrating on the inferential. The study had sought to answer the research question: How do bank customers perceive adequacy of bank agents float?

4.2 General respondents' information

The study had a target population of 263 agents out of which 220 responded. This was an 84% response rate which is acceptable for this kind of study. According to Punch, K. F. (2003). Response rates are more important when the study's purpose is to measure effects or make generalizations to a larger population and less important if the purpose is to gain insight. Acceptable response rates vary by how the survey is administered: On e-mail anything above60% response rate is good. The bio data on the responded was captured through the three questions as per section (A) questionnaire. Question one required the supervisor to list five businesses their agents engaged in beside agency. The distribution of agents as per their core business is represented in figure 4.1.
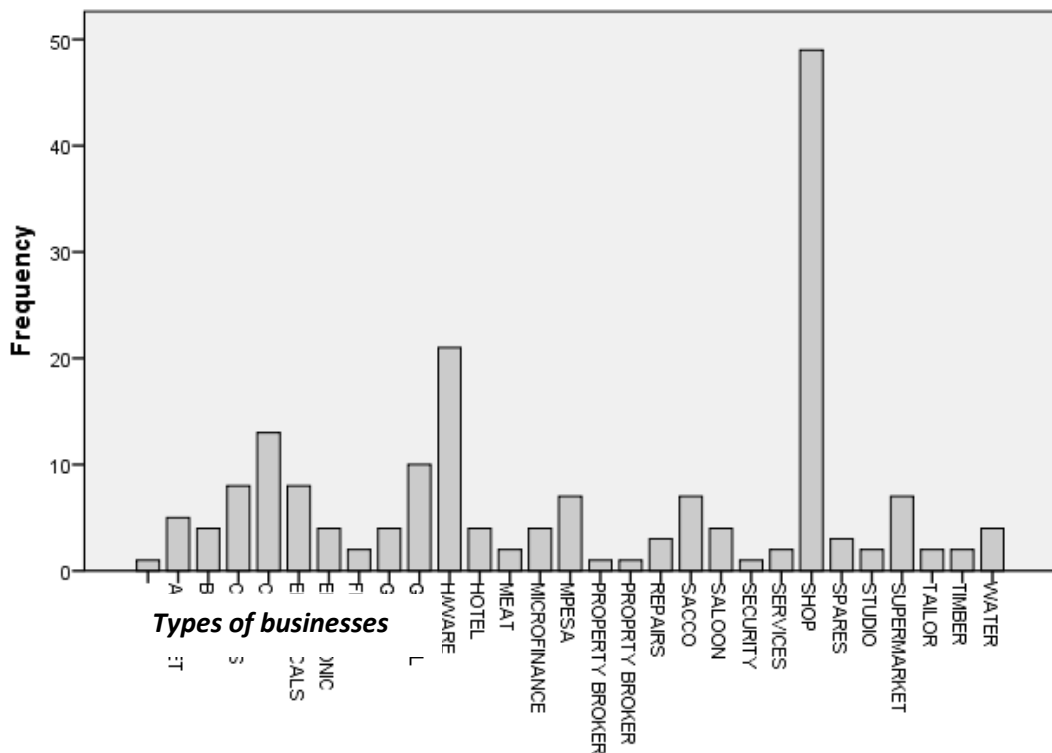

Figure 4.1 Core business activities undertaken by Agents

Over 70% of the agents had business experience of 5years. None was in business for less 2years in business which is a qualification requirement by CBK.
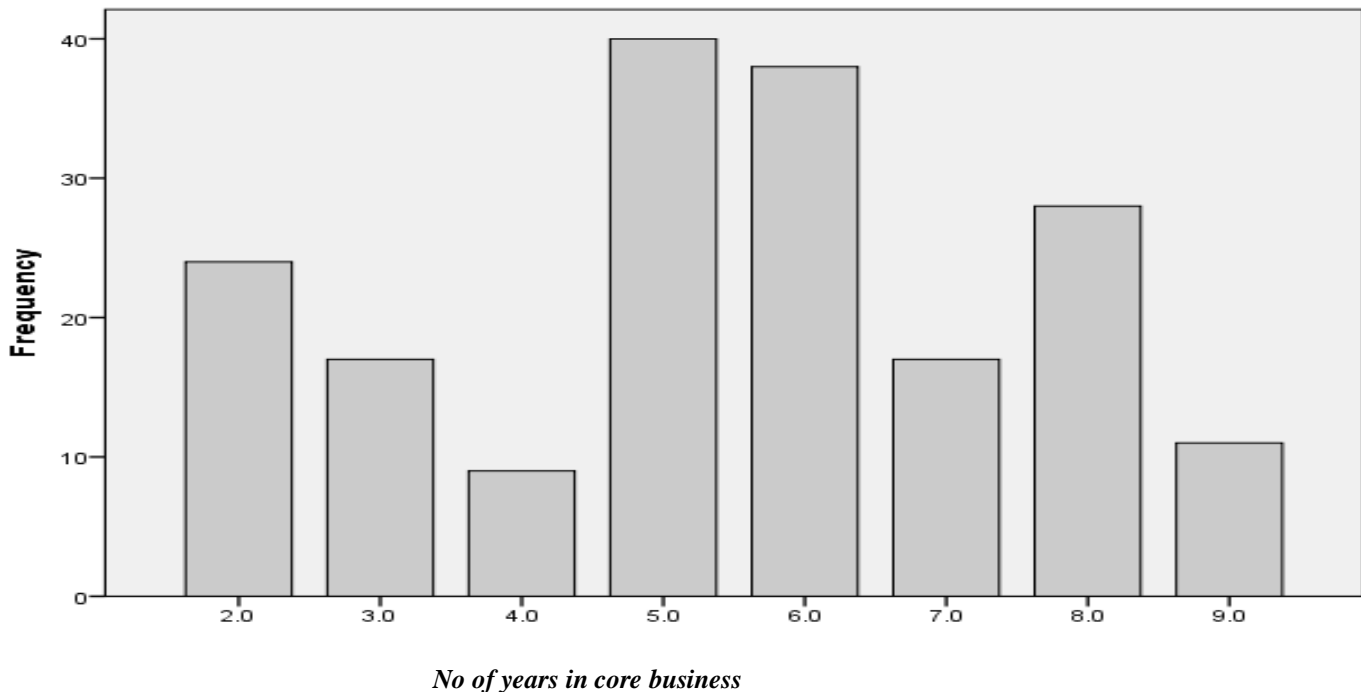

No of years in core business

Figure 4.2 Agents number of years in business - core business.

Responses on how far the nearest branch of the bank you serve, agents appeared to cluster near the branch and further away from the branch, This depicts both the urban and rural Scenarios. Asked how the distance from the bank affected their float management, those far from branches indicated they had difficulties replenishing their float. Agents near branches indicated they benefit from reduced cost of float replenishment but were negatively affected in that they received more deposits than withdrawals. Banks do not charge customers for deposits both at the bank and at the agent but pay a lower commission to agents on deposits received. This creates a pull to the agents on small and third party deposits like bills, school fees and rent. This creates a one sided direction on float movement resulting to frequent trips to the bank as withdrawals cannot match the high deposits. Value of deposit transaction so long as it can be accommodated by the agent float capacity does not inform customer's decision on where to transact , rather the convenience of the agent or the bank in terms of accessibility is the key determinant of where to transact. For withdrawals the size of the transaction informs the decision by the customer on where to transact. For transactions above Kes 10,000 Customers preferred to make withdrawals at branch or at ATMs where withdrawals are relatively lower than at the agents.
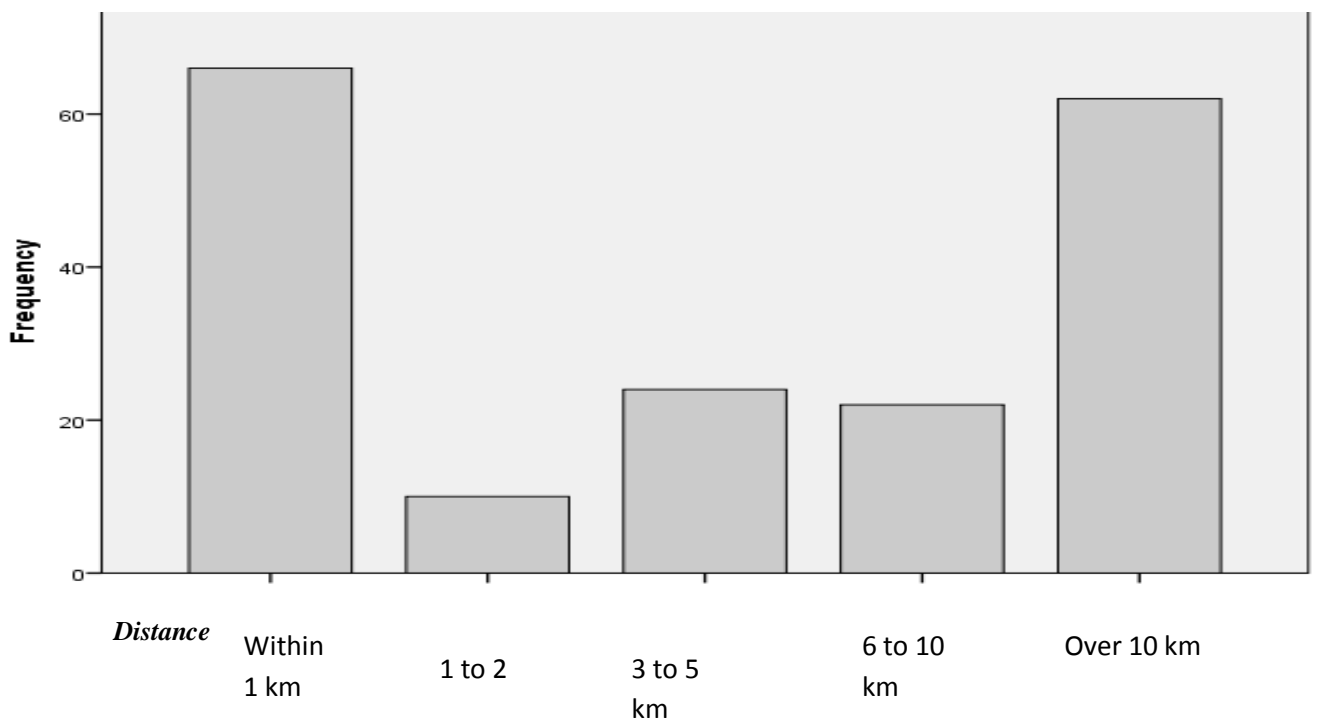

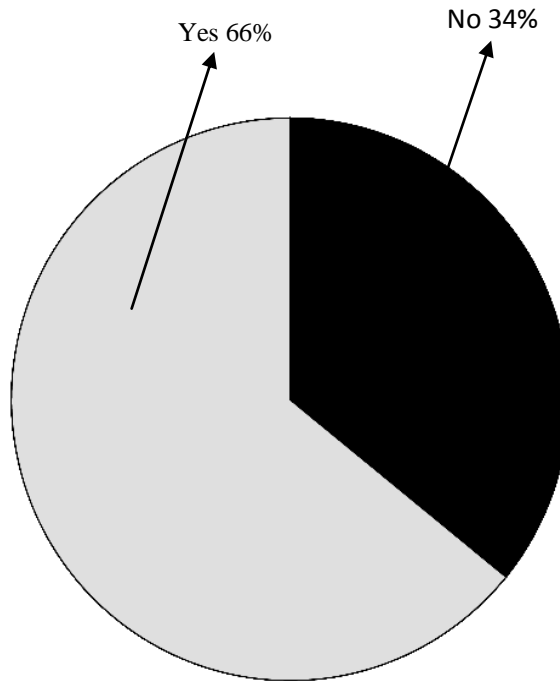**Figure 4.3 distance of the nearest bank branch from the agent**

Figure 4.4 Response on whether agent maintain adequate float

The response on whether customers perceived agent float as adequate also tallied with the distribution of total agent transactions where transactions of between Kes 0 and 5,000 accounted for 70 % of all agent transactions. The agents had the following way of coping with increased demand for float during weekends and holidays where the banks remained closed.

Float management	Frequency	Percent	Cumulative Percent
I plan ahead for increased float	149	67.9	67.9
Do not open on weekend and holidays	13	6.0	73.9
No difference in float requirement	8	3.8	77.7
Serve as long as float can last	50	22.3	100.0
Total	**220**	**100.0**	

Table 4.1 Agents float management on weekends and holidays when banks are closed
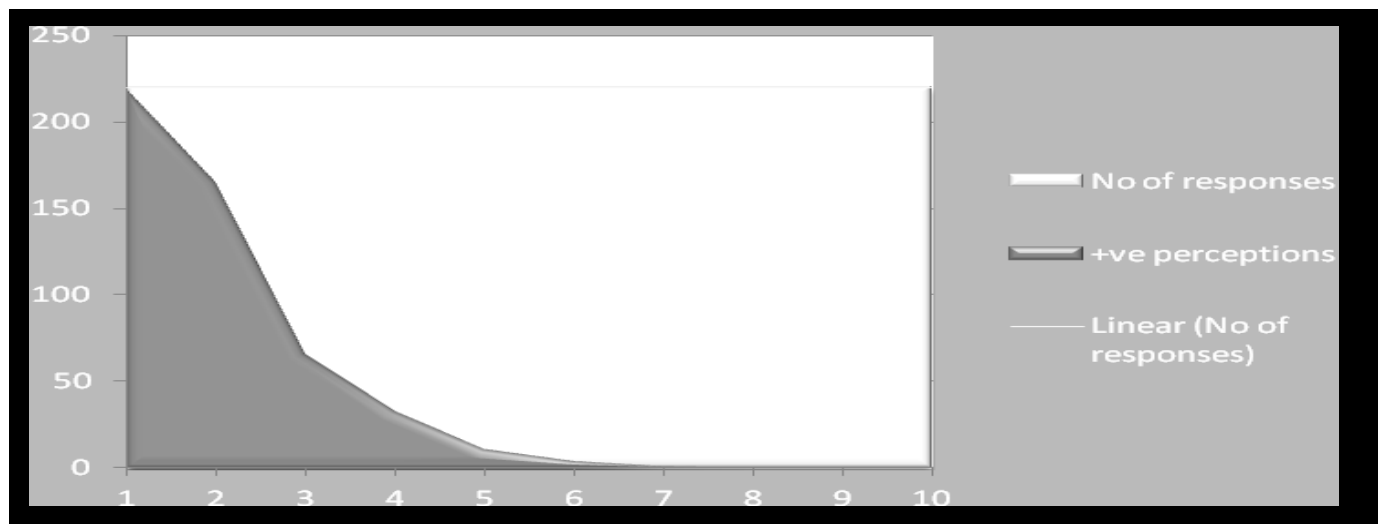

Figure 4.5 Distribution of positive perception as transaction values changed from Kes 5,000 to 50,000.

Distribution of positive perceptions on float adequacy was skewed to the left. Figure 4.5 shows how perception changed along the ten classes of transactions value. The lowest class with an upper limit of Kes 5,000 accounted for 66% percent of all positive responses. This percentage sharply declines to 18% in the next class with an upper class limit of Kes 10,000. The first three classes from Kes 0 to Kes 15,000 cumulatively accounted for 91% of all positive perceptions. The average transaction value at the agency stood at Kes 5,525 against 19,950 at the bank while the average float maintained by agents was 114,500. These findings validate the observations by Mars and Mireya (2010) that, by its

nature, the bank agency model was intended to take banking to the low income and rural populations. The suggestion of all these is that customers transacting up to Kes 10,000 can confidently expect to be served at the agent locations while customers transacting above Kes 15,000 are likely to be turned away at the agent outlet for   the main reason of inadequate float. Coincidentally the average transaction size of Kes 19,950 at bank lies in the next class of transaction size after the cutoff for agent transaction value of Kes 15,000 meaning that the cutoff transaction size at agency is the beginning of bank transactions. This seem to suggest that agency has created its own market of previously unbanked customers and thus validating the findings of previous studies as follows: Agency banking has helped to spread reach of financial services which in turn has increased the profitability of commercial banks in Kenya (Mwando, 2013). However, one thing agency banking has failed to do is to decongest banking halls. (Njuki, 2012).

Using the econometric model set as:
Li = β₁ + β₂ Xi +μi, Where; $Li = \beta_1 + \beta_2 Xi + \mu i$
Li is the logarithm of odd ratio.
Odd ratio is the Probability **Yi** = 1 divided by probability **Yi** = 0 .i.e. **p/1-p.**
Yi is the explanatory response where Yi = 1 for positive perception and Yi = 0 for negative perception
β₁ is the slope
β₂ is the intercept
Xi the transaction value/size which is the independent variable and is assumed to influence the outcome Y.
μi is the error term.

The resulting relationship between Yi and Xi was:
  Li^= 4.885 – 0.0003Xi.
  t = (5.835) (-11.833)
  p = (0.000)   (0.000)
But Li is the logarithm of the odd ratio given by p/1-p.
Therefore, $P/1\text{-}P = e^{4.885} + e^{-0.0003}$
$e^{-0.0003} = 0.9997$.

The odd interpretation of this is that, on average the odd ratio of a customer perceiving agent float as adequate, reduces by 99.97% with every unit (Kes 5000) increase in transact value.

5.0 Conclusions and Recommendations
5.1Introduction
This chapter discusses conclusions and recommendations and suggestions for further studies.

5.2 Conclusions
The average transactions cutoff size at the agency of Kes 15,000 against the average transaction value of Kes 19,950 at bank coincides with the next class of transaction size which has an upper class limit of Kes 20,000, meaning that the cutoff transaction size at agency is the beginning of bank transactions. This seem to suggest that agency has created its own market of previously unbanked customers which is a different segment from what banks have been banking and thus validating the findings of previous studies as follows. Agency banking has helped to spread reach of financial services which in turn has increased the profitability of commercial banks in Kenya (Mwando, 2013). However, one thing agency banking has failed to do is to decongest banking halls (Njuki, 2012). Just as the banks have set a maximum limit on how much a customer can withdraw per day on the ATMs (partly to increase profitability by serving more transactions on a per transaction charge basis). The agency model seem to have derived its per transaction limit of between Kes 10,000 and 15,000 for optimal utilization of float that lead to profit maximization on a per transaction commissions. Customers transacting within this limit will perceive agents as having adequate float as they will be readily served while misplaced customers transacting above Kes 15,000 are likely to suffer disappointment at the agent outlets and thus perceive the agency model negatively. Banks have the responsibility of managing the expectations of customers seeking agency services by communicating a likely limit for transactions size limit at the agency. Adverts and communications by banks have portrayed agency as solution for all cash transactions and thus contributed to misplaced customers seeking to transact above the agents' capacity.

5.3 Recommendations for further studies
Based on conclusions reached in this study, it would be ideal if a comparative study is done depicting general trend of transactions numbers at the three complimenting bank channels namely the Agents, the ATMs and the Bank over the counter transactions for the last say five years. This could then reinforce or disapprove the conclusions of this study.

References
Arrow, K. J. (1985). Information Structure of the Firm. American Economic Review, Vol. 75, No. 2, pp. 303-307., ISSN: 0002-8282

Berry, L.L., Parasuraman, A. and Zeithaml, V.A. (1994), *"Improved service quality in America*: *Lessons learned"*, Academy of Management Executive [Online] Accessed from; *http://areas.kenan flagler.unc.edu/marketing/faculty staff/zeithaml* - [12th Oct 2014]

Bindra. S. (2007) Crown your customer*, Storymoja:* Nairobi

Bloodgood, J.M and Michael A.C, (2010)*""" Adoption-innovation theory and knowledge use in organizations"""*, Management Decision, Vol. 48 Iss: 8, pp.1159-1180

CBK. (2014) *Developments in the kenyan banking sector for the quarter ended 31ˢᵗ Mar, 30ᵗʰ Jun, 30th Sep 2014*[Online] Accessed from;http://www.centralbank.go.ke/index.php/bank-supervision-report#banking-sector-reports[Accessed 12th March 2015]

CGAP.   (2010).   Focus   Note: Regulating   Branchless   Banking   agents.   [Online]Accessed   from; *http://www.gsma.com/mobilefordevelopmen   t/wp-content/ uploads/2012/06 / agentnetworksinbrazilcgapfgv1_7.pdf 1934[15th Feb, 2015]*

CGAP, (2011).   *The lurking challenge of branchless banking: Activating the inactive customer*. Available at: http://technology.cgap.org (Accessed on 14 Feb 2015).

Cutcher, L. (2014). Bringing Back the Bank: Local Renewal and Agency through Community Banking. *Organization Studies (01708406)*, *35*(1), 103-119.

Eisenhardt, K. (1989). Agency Theory: An Assessment and Review. Academy of Management Review, Vol. 14, pp. 57-74., ISSN: 0363-7425

Equity bank. (2014) Financial results half year 2014[Accessed from; *http://equitybankgroup   com/index.php/investor-relations/financial-results*[Accessed 3rd Oct 2014]

Jayo, M., Diniz, E. H., Zambaldi, F., & Christopoulos, T. P. (2012). Groups of services delivered by Brazilian branchless banking and respective network integration models. *Electronic Commerce Research & Applications*, *11*(5), 504-517.

Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. Journal of Financial Economics, Vol. 3, pp. 305360. ISSN: 0304-405X

Kothari, C. R. (2004). *Research methodology*: *Methods and techniques*. New Delhi: New Age International (P) Limited Publishers.

Locke, E. A., Alavi, M. & Wagner, J. (1997). Participation in decision-making: An information exchange perspective. In G. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 15, pp. 293-331). Greenwich, CT: JAI Press.

Mas, I and Mireya, Almazán (Bill & Melinda Gates Foundation) DRAFT December 2010   Electronic copy available at: http://ssrn.com/abstract=1719580 1

Mathooko. J.M, F.M, P.M. (2011), Academic Proposal Writing. *GRAMSs*: Nakuru.

Jensen. M,, Meckling.W.H,(1976.Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics,8(4),PP.625-643

Mugenda and Mugenda (1999). Reserch Methods*: Qualitative and Quantitative Approaches.*Nairobi: Act Press. *N*airobi

Mutai .B. K (2000) How to write quality research proposal, *Goodtouch printers*: Mysore

Mwando, S. (2013). Contribution of Agency Banking on Financial Performance of Commercial Banks in Kenya. *Journal of Economics and Sustainable Development*. 4, (20).

Nachmias, C., & Nachmias, D. (1996). Research methods in the social sciences (5th ed.). New York: St. Martin's Press

Njuki, M. (2012). *Agencies fail to decongest Kenya's banking halls.* Available at: http://www.capitalfm.co.ke/business (Accessed on 10th, April 2015)

Ombutora, E.K. & Mugambi, F. (2013). Role Of Agency Banking On The Performance Of Banking Agent Entrepreneurs: A Case Study Of Co-Operative Bank Co-Op Jirani In Kibera, Nairobi. *International Journal of Arts and Entrepreneurship***,** 1(5), 243-256

Omumi, K. (2010) Branchless Banking and Use of Agents including Postal Corporation of Kenya. Available at: http://aitec.usp.net. (Accessed on 11 March 2015).

Podrug, N. (2010) Stewadship Relations Within Management Hierarchy in Large Croatian Companies. Doctoral dissertation. Faculty of economics and business Zagreb, Zagreb.

Punch, K. F. (2003). *Survey Research: The Basics. London*: Sage Publications Ltd.

Tipuric, D. (2008). Korporativno upravljanje, Sinergija, 953-6895-07-02, Zagreb

Nganga, S.I. Mwachofi, M.M, (2013), Technology Adoption and the Banking Agency in RuralKenya: *Journal of Sociological Research*[Online] Accessed from;http*:// www.macrothink.org/journal/index.php/jsr/.../2993*[Accessed 23rd Oct 2014]

Venkatesh, V., Speier, C., and Morris, M.G. "User Acceptance Enablers in Individual Decision Making about Technology: Toward an Integrated Model," *Decision Sciences* (33:2), 2002, 297-316.

Zeithaml, V.A. and Bitner, M. J. (1996), Services Marketing*,* 1st ed., *McGraw-Hill*, New York.