

## An Analysis of the Effectiveness of Agency Banking As A Financial Inclusion Strategy in Commercial Banks (A Survey Of Selected Commercial Banks In Kiambu Town)

\*Pauline Mumbi Ndegwa<sup>1</sup>

<sup>1</sup>Business Department, Kenya Methodist University, Kenya,

Corresponding Author: \* Pauline Mumbi Ndegwa

---

**Abstract:** The purpose of this study was to evaluate role of agent banking services in promoting financial inclusion in Kenya by analyzing the extent to which geographical coverage and liquidity affect agency banking as a financial inclusion strategy. The study adopted a cross-sectional survey design. The study targeted 38 administration managers and supervisors of the commercial banks in Kiambu which had adopted the agency banking model. Census was adopted to include 38 managers and supervisors to participate in the study. The study used a self-administered questionnaire to collect data. Data analyzed using descriptive (frequency distribution and percentages) and inferential statistics (Regression) using SPSS version 20 for windows. Geographical coverage ( $p=0.037$ ) and liquidity ( $p=0.028$ ) were found to be statistically significant at a 95% confidence level. The study concluded that geographical coverage is the most important benefit and therefore the most significant driver of financial inclusion. The study recommended that banks should seek to provide more services through agent banking to enhance financial inclusion especially in rural areas. Higher cash deposits and withdrawals should also be allowed since agents don't have problems with liquidity. .

**Keywords:** Agent, Agency Banking, Financial inclusion, Geographical coverage, Financial institution

---

Date of Submission: 26-07-2017

Date of acceptance: 19-08-2017

---

### I. INTRODUCTION

Banks are essential for each country's economy, since no development can be accomplished unless reserve funds are proficiently directed into speculation. In this respect, the lack of a full-fledged banking system has often been identified as a major weakness of the centrally planned economies (Rostowski, 2012). Drigă and Dura (2010) indicate that banks as financial intermediaries are expected to provide basic financial services for everyone. Banking, considered as mirror of economic growth, can contribute to economic development in at least two ways: can add to monetary improvement in no less than two courses: straightforwardly, by expanding asset report things, and in a roundabout way, through financing. Banks likewise make occupations for their groups and produce returns for their investors, in this manner adding to the financial development of neighborhood groups and the country overall.

Financial inclusion is defined as the ability of an individual, household, or group to access a full range of responsibly delivered, affordably priced and reasonably convenient formal financial services (Christen, Lauer, Lyman & Rosenberg, 2011). According to Financial Sector Deepening (2010) Kenya has made amazing steps in the course of recent years in financial inclusion. While figures can't match those of Southern Africa, the extent of the populace which is totally barred is down in Kenya compared to other East African nations. On a similar note, FinAccess (2009) noticed that 58.5% of clients of formal money related administrations and 56% of clients of other formal monetary administrations likewise utilize casual budgetary administrations. Then again in 2009, country Kenyans were more averse to utilize formal saving money or other formal monetary administrations, however were still more prone to utilize casual budgetary administrations (FinAcces, 2009).

Agent banking has become one of the most promising strategies for offering financial services in emerging markets. This approach can be particularly capable when serving the unbanked poor as a result of its capacity to decrease banks' cost-to-serve and achieve low-pay specialists where they live (Chaia, Aparna, Goland, Gonzalez, Morduch & Schiff, 2010). Agency banking is a branchless banking service offered by banking institutions whereby the bank appoints existing businesses to offer a variety of banking services, on its behalf to its clients who are not reached by traditional bank networks, especially those living in remote and rural areas (Keeler, 2011). In 2009, the Central Bank of Kenya (CBK) commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act (passed as part of the Finance Act, 2009) allowed banks to start using agents to deliver financial services. Using small shops, petrol stations, pharmacies and other retail outputs (essentially any profit-making entity that has been in business for at least 18 months and

can afford to fund a float account to facilitate payment) as agents could have a dramatic impact on improving access to financial services, especially in rural areas ( FinAcces, 2009).

Kiambu is a town in Kiambu County, Kenya with an urban population of 13,814. It is the capital of the Kiambu County, which bounds the northern border of Nairobi. Other proximate towns are Ruiru, Gatundu, Limuru and Kabete. The town is surrounded by hilly Kikuyu farmland although is under urbanisation as Nairobi is growing fast and more people settle in neighbouring towns. Kiambu is seen as a future anchor to the capital city Nairobi which is undergoing rapid development with limited space for growth.

### **1.1 Statement of the Problem**

The agent-banking model has been in operation for about 6 years now having begun in 2010. Agency banking empowers bank clients to get to the essential keeping money administration, for example, stores, withdrawals, dispensing and reimbursement of advances, installment of bills, exchange of assets, adjust enquiry, era and issuance of small scale bank proclamations, gathering of archives in connection to account opening, advance application, credit and check card applications, organization cell phone saving money administrations among others. However, empirical evidence as to whether, agent banking as a financial inclusion tool has worked for banks is limited. This creates a knowledge gap regarding effectiveness of agent banking. It is important to identify the relationship between agency banking and financial inclusion. It is against this background that the researcher sought to evaluate the effectiveness of agency banking as a financial inclusion strategy in commercial banks.

### **1.2 Objectives of the Study**

- (i) To evaluate the extent to which geographical coverage affect agency banking as a financial inclusion strategy.
- (ii) To assess the extent to which liquidity affects agency banking as a financial inclusion strategy.

### **1.3 Research questions**

- (i) To what extent to which geographical coverage affects agency banking as a financial inclusion strategy?
- (ii) To what extent does liquidity affects agency banking as a financial inclusion strategy?

## **II. LITERATURE REVIEW**

### **2.1 Theoretical Review**

#### **Agency Theory**

Agency theory has been the subject of extensive research since its introduction in modern form by Jensen and Meckling (1976). The generality of the theory of Agency appears unquestionable and it has been widely adopted. According to Nurcan (2005), the model effectively predicts specific marvels under scrutiny in just the most straightforward of cases, and even in the easiest of cases there are situations where the basic organization show has restricted achievement. An agency relationship arises when at least one principals draw in someone else as their operator to play out an administration for their benefit. A key and a specialist frame an office relationship since they each hope to get some net advantage. The gatherings expect that the relationship will prompt an effective division of work. Execution of this administration brings about the designation of some basic leadership expert to the operator. This appointment of duty by the important and the subsequent division of work are useful in advancing an effective and beneficial economy. In any case, such designation additionally implies that the chief needs to put confide in a specialist to act in the key's best advantages (Walker, 2003).

Agency Theory is relevant to this study because it appreciates the role of the agent in achieving a greater goal. According to the theory the delegation of responsibility by the principal and the resulting division of labor are helpful in promoting an efficient and productive economy. The delegation of responsibility in the context of this study is the outreach of financial services from the banking halls to where people live and work ensuring rise in financial inclusion.

#### **Diffusion of Innovation Theory**

Diffusion of Innovation (DOI) Theory, developed by Everett Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system (Rogers, 2003). The end result of this diffusion is that individuals, as a component of a social framework, receive another thought, conduct, or item. Appropriation implies that a man accomplishes something uniquely in contrast to what they had beforehand. The way to appropriation is that the individual must see the thought, conduct, or item as new or imaginative. It is through this that dissemination is conceivable

There are five main factors that influence adoption of an innovation, and each of these factors is at play to a different extent in the five adopter categories : relative Advantage - The degree to which an innovation is seen as better than the idea, program, or product it replaces. Compatibility - How consistent the innovation is with the values, experiences, and needs of the potential adopters. Complexity - How difficult the innovation is to understand and/or use. Triability - The extent to which the innovation can be tested or experimented with before a commitment to adopt is made. Observability - The extent to which the innovation provides tangible results (Carter, 1998).

Rogers' diffusion of innovations theory is appropriate in evaluating the effectiveness of agency banking as a financial inclusion strategy in commercial banks. This is because agency banking can be viewed as an innovation in itself and Rogers' diffusion of innovations attempts to explain why an innovation may be successful or not, in this case improved financial inclusion.

## **2.2 Empirical review**

### **2.2.1 Geographical Coverage of Agency Banking**

One of the reasons which can be attributed to the low financial inclusion in rural areas is the long distance they need to travel to access financial services. Sometimes, the measure of cash somebody needs to pull back from the bank is proportionate, or even not as much as the transportation cost, while others locate the new ultra present day managing an account lobby scaring. In this way they stay away from formal monetary administrations and settle on casual money related administrations which are promptly open in provincial ranges (Wainaina, 2011). With just over 2.5 branches per 100,000 people. Kenya stays with a moderately scanty budgetary framework by universal standard. Development of ATM systems has kept on developing firmly amid the year with few indications of a loosening in the pace of organization. However at only 4.7 ATMs per 100,000 people, again the penetration remains low by international comparison (FinAcces, 2009).

Collins et al. (2009) showed how poor people struggle to manage their financial lives given the lack of services suitable to their tiny, highly viable and uncertain income. According to Ivatury and Timothy (2006), agency banking could be of advantage to the customers in the accompanying ways; bring down exchange cost, clients can along these lines withdrawal or store little sums without acquiring additional costs like transport to a bank office, longer opening hours since this organizations work for longer hours than banks, shorter lines than in branches, more available for uneducated people and the extremely poor who may feel threatened in branches. Therefore clients save money on time they need to go to a bank office, and the time they need to hold up in line to be served. Keeping money organizations help monetary foundations to redirect existing clients from swarmed branches giving a "corresponding" frequently more advantageous channel. Other money related foundations particularly in creating markets utilize specialists to come to an "extra" customer section or geology. Achieving poor customers in provincial regions is regularly restrictively costly for budgetary foundations since exchange numbers and volumes don't take care of the expense of a branch (Kitaka, 2001). In such environments, banking agents that piggy back on existing retail foundation – and bring down set up and running expense can assume a fundamental part in offering many low wage individuals their first-time access to scope of budgetary administrations. Likewise, low – salary customers frequently feel more great managing an account at their neighborhood store than strolling into a marble branch (Adiera, 1995).

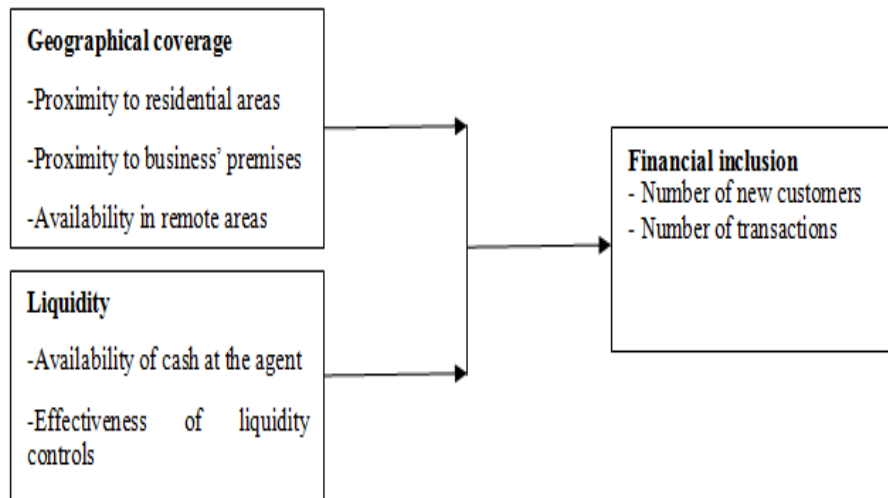
### **2.2.2 Liquidity in Agency Banking**

One of the biggest challenges in rolling out banking agencies is the establishment and the effectiveness of the agent network. Agents are the touch- points where the subscribers of the service can get money into and out of the system. (Agents are often also referred to as cash-in and cash-out points). In cases where a customer touches base at an agent with the need to pull back a vast sum it happens that the agent doesn't have enough money to fulfill the money out demand. This prompts disappointment and is one reason why take-up of these frameworks is slower than what is normal. This issue is alluded to as the operator liquidity issue how to guarantee that the specialist has adequate money accessible to fulfill the need of the framework (Central Bank of Brazil, 2007). This issue is frequently drawn nearer in a way where the framework monitors the genuine trade accessible out the drawer of every operator so as to direct supporters where they can pull back huge sums. This approach is plainly intricate and frequently comes up short on account of the casual idea of specialists business.

Musau (2013), observed that absence of money at money indicates does not show up be a far reaching issue as of now, as per her in-nation considers; it creates the impression that low-pay customers might endure periodic liquidity setbacks in return for coherence of administration over the long haul and the comfort of a broad system. Lehman (2010), notes that agents will not provide quality service to customers without ongoing, on-site and in-store supervision to ensure the agents are liquid, consistently branded, and following the prescribed business processes. Suppliers need to choose how to partition the differed administration capacities and whether to keep those capacities in house or outsource to an autonomous specialist organization. As the systems develop, it is progressively troublesome for the supplier to cover the "last mile" of the dissemination

chain, so most utilize outsiders for part or the greater part of the channel administration capacities. Suppliers require an arrangement of standard operator site visits to guarantee that specialists are in consistence with the business forms and keep up legitimate marking and marketing

### 2.3 Conceptual framework



**Figure 1** Conceptual framework

**Independent variables**

**Dependent Variable**

## III. RESEARCH METHODOLOGY

### 3.1 Research Design

The study adopted a cross-sectional survey design. A cross-sectional survey collects data to make inferences about a population of interest (universe) at one point in time. Hall (2013) describes cross-sectional surveys as snapshots of the populations about which they gather data. A cross sectional study looks at data collected across a whole population to provide a snapshot of that population at a single point in time. In a descriptive survey research objectives are predetermined which allows data collection to be relevant and sufficient to the study problem.

### 3.2 Target Population

The study targeted administration managers and supervisors of the commercial banks in Kiambu which have adopted the agency banking model. This is because such persons are in-charge of operations in the bank and are resourceful in various areas and activities of the bank such as agent banking. There were 15 commercial banks in Kiambu town where 4 had implemented the agency banking model. Census was employed in selecting participants in the study. This is because the total population was small in number (38). As such the study included all 38 administration managers and supervisors of the commercial banks in Kiambu which have adopted the agency banking model. According to Burns (2010), one of the advantages of census surveys over the other types of surveys is accuracy. Since the respondents involved in census surveys are the members of a given population, the survey data to be collected will be more reliable and accurate than the data gathered from sampling surveys. Administration managers and supervisors of the commercial banks in Kiambu have been purposively selected since they have had an experience with agency banking.

### 3.3 Data Collection

The study collected primary data. In this research, the researcher used questionnaires to collect data. The researcher opted for the questionnaire because the responses are gathered in a standardized way so questionnaires are more objective compared to other tools of data collection. The researcher developed the questionnaires. The questionnaires were in two sets, one set for the administration manager and another set for other managers and supervisors. Content validity was used in this study; content validity is the degree to which the instrument measures what the test is designed to measure. This is important in the establishment of accuracy and truthfulness of the research. In order to ascertain face validity, the instruments were designed and handed to

the supervisors in the School of Business, KEMU for review. Instrument validity was further established by undertaking a pretest. To test the reliability of the instruments the researcher conducted a pilot study in Kiambu. Test-retest technique was employed. The study tested the internal consistency of the instruments by computing Cronbach's alpha to determine the reliability of the instrument. A Cronbach's alpha of 0.8 and above was taken as acceptable reliability according to Cronbach (1957).

### 3.4 Data Analysis

Descriptive methods such as frequency distribution and percentages were used to analyze quantitative data. The qualitative data were analyzed using thematic analysis. Regression analysis was conducted with the help of SPSS. Linear regression was used to help indicate if agency banking had a significant relationship with financial inclusion and to indicate the relative strength of different independent variables'. The algebraic expression of the regression model which consists of the constant term coefficient and error term took the format below;

$$Y = X + X_1GC + X_2 LQ + e$$

Where: Y = Financial Inclusion, X = Constant, X<sub>1</sub>, & X<sub>2</sub> = Co-efficients, GC = Geographical coverage, LQ = Availability of liquidity and e = residual error

## IV. FINDINGS

### 4.1 Response Rate

Thirty eight questionnaires were administered administration managers and supervisors of the commercial banks in Kiambu which have adopted the agency banking model. Thirty four questionnaires were returned. This represents an 89% response rate which is above the 70% threshold recommended by Mugenda and Mugenda (2012).

**Table 1 Response Rate**

Population	Questionnaires distributed	Questionnaires returned	Questionnaires fit for analysis	Response rate
Managers	8	5	5	63%
Supervisors	30	29	29	97%
Total	38	34	34	89%

### 4.2 Geographical Coverage

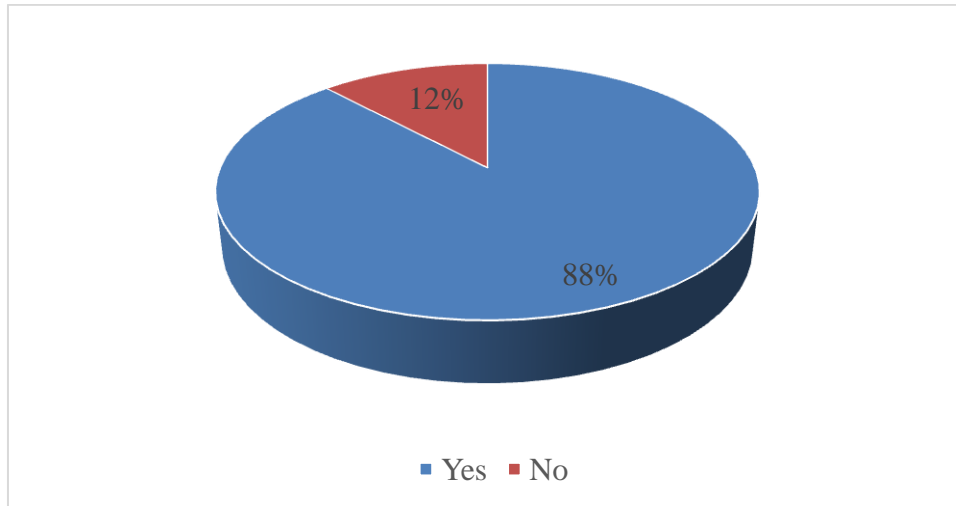
Majority (80%) of the participants agreed that agent banking has reduced overcrowding in banking halls. Majority (70%) also agreed that clients are willing to pay more at agent outlets since they are near their premises. In addition, 88% agreed that geographical coverage of agents influence financial inclusion. The findings are in agreement with findings of Kitaka (2001) and Wainaina (2011).

**Table 2 Geographical Coverage**

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Agent banking has reduced overcrowding in banking halls	72%	8%	2%	10%	8%
Clients are willing to pay more at agent outlets since they are near their remises	32%	38%	4%	20%	6%
Geographical coverage of agents influence financial inclusion	66%	22%	2%	6%	4%

### 4.3 Liquidity

A significant number (88%) of respondents agreed that agent banking outlets were monitored to ensure sufficient liquidity. This show that majority of banks valued the liquidity aspect of the agency banking model. This is in agreement with Stephens and Kevin (1998)



**Figure 2** Monitoring of agents to ensure liquidity

Findings in table 3 show that 35% of the participants indicated that agents rarely experienced liquidity challenges. An equal number (35%) also indicated that agents never experienced liquidity challenges. This shows that liquidity in agent banking outlets was not a problem. The finding is however in disagreement with Kinyajui (2011) who found that many banks are finding that agents lack capacity to handle large transactions of cash and under-spend on security measures.

**Table 3** Frequency of liquidity challenges

	Frequency	Percentage
Sometimes	10	30
Rarely	12	35
Never	12	35
Total	34	100

Majority (94%) of the participants indicated that liquidity affected financial inclusion by a large extent. This is in disagreement with Musau (2013).

**Table 4** Effect of liquidity and financial inclusion

	Frequency	Percentage
Very large extent	22	65%
Large extent	10	29%
Small extent	2	6%
Total	34	100

Majority (78%) of the respondents agreed that many traders cannot provide agent banking services due to frequent lack of liquidity. Forty seven percent of the participants agreed that some clients are discouraged from using agent banking services due to frequent lack of liquidity. Eighty eight percent of the participants agreed that availability of liquidity is one of the determinants of improved financial inclusion through the agent banking model. This is in agreement with central Bank of Brazil (2007).

**Table 5** Effect of liquidity on customers' and agents

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Many traders cannot provide agent banking services due to frequent lack of liquidity	58%	20%	2%	16%	4%
Some clients are discouraged from using agent banking services due to frequent lack of liquidity	23%	24%		23%	20%
Availability of liquidity is one of the determinants of improved financial inclusion through the agent banking model.	66%	22%	4%	6%	2%

#### 4.4 Financial Inclusion

Majority (75%) of the participants indicated that less than 25% of the accounts opened in the bank were attributable to agent banking.

**Table 6**Accounts opened attributable to agent banking

	Frequency	Percentage
Below 25%	3	75
26%-50%	1	25
Total	4	100

Half (50%) of the bank branch manager in the study attributed between 51 percent and 75 percent of transactions to agent banking. This shows that agent banking was a useful tool in improving customers reach with the bank.

**Table 7** Transactions attributable to agent banking

	Frequency	Percentage
26%-50%	1	25
51% - 75%	2	50
Over 75%	1	25
Total	4	100

All (100%) bank managers in the study agreed that agent banking has improved financial inclusion.

#### 4.5 Regression analysis

Table 8 shows the model summary for the regression analysis. The R value 0.964 indicates that there is a strong positive correlation between agency banking and financial inclusion. The r-square is 0.863 meaning that costs of agent banking, security concerns, geographical coverage and liquidity can explain 86.3% of financial inclusion in commercial banks.

**Table 8 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.964a	.929	.863	.039

Findings in Table 9 show the F statistic. The F value indicates whether the set of independent variables as a whole contribute to the variance in the dependent variable. An F value of 25.68 was found. Findings in Table 9 further show that the F value was significant (p=0.02) at 95% CI. This means that agency banking is significant in predicting financial inclusion.

**Table 9**ANOVA output

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.283	3	1.428	25.68	.0026
	Residual	.33	6	.055		
	Total	4.613	9			

Table 10 shows the contribution of each variable in explaining financial inclusion as shown by unstandardized beta values which assess the contribution of each variable towards the prediction of the dependent variable. Geographical coverage (p=0.037) and liquidity (p=0.028) were found to be statistically significant at a 95% confidence level.

**Table 10** Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.349	.459		0.933	.535
	Geographical coverage	.407	.264	.215	2.0	.037
	Liquidity	.352	.239	.235	2.827	.028

The overall equation as suggested in the model can be represented by use of unstandardized coefficients as follows:

$$Y = 2.349 + 0.407 GC + 0.352 LQ + 0.039$$

Where: Y = Financial Inclusion, GC = Geographical coverage and LQ = Availability of liquidity

According to the regression equation established, taking all factors into account with constant at zero, financial inclusion would be 2.35. The model also shows that a unit change in geographical coverage (GC) would result in a 40.7% change in financial inclusion. According to the findings geographical coverage is the most affecting. The findings are consistent with Kitaka (2001) who found that banking agencies help financial institutions to divert existing customers from crowded branches providing a “complementary” often more convenient channel.

## **V. Discussion, Conclusion and Recommendations**

### **5.1 Discussion**

The study found that geographical coverage was statistically significant. This is attributable to the convenience provided by agency banking saving customers time from queueing at ATMs or in banking halls. Majority (80%) of the participants agreed that agent banking has reduced overcrowding in banking halls. The findings are in agreement with Kitaka (2001), Muriungi Ivatury (2006) and Timothy (2012). The study also found that liquidity was statistically significant. This is attributable to the fact that agents were located in established businesses thereby making liquidity shortage a non-issue. Availability of liquidity enhanced customers' confidence in the model. The findings are therefore in agreement with Kinyanjui (2011) and Musau (2013).

### **5.2 Conclusion**

Geographical coverage is the most important benefit and therefore the most significant driver of financial inclusion. Customers don't have to travel far and then queue in ATM and banking halls to make payments or withdrawals. The convenience of agent banking is such that customers don't mind paying a few more shillings for services at the agent. Availability of liquidity is another benefit of agent banking. Infrequent shortage of cash at the agent banking outlet increases customers' satisfaction and trust with the agent banking model.

### **5.3 Recommendations**

Banks should seek to provide more services through agent banking to enhance financial inclusion especially in rural areas. Higher cash deposits and withdrawals should be allowed since agents don't have problems with liquidity.

## **ACKNOWLEDGEMENT**

I thank the Almighty God for giving the gift of life and good health to carry out my studies. I appreciate Kenya Methodist University for granting me the opportunity to further my education. I acknowledge my supervisors Martin Kinyanjui and Dr. Hellen Mugambi who provided me with guidance in writing this project. I also thank my family for the support they have given me throughout the course.

## **REFERENCES**

- [1]. Alliance for Financial Inclusion (2012), Agent banking in Latin America, The AFI Discussion Paper series.
- [2]. Anyanzwa, J. (2012), Branchless banking runs into headwinds, Standard Digital.
- [3]. Beck T., Demirgüç-Kunt, A., & Levine, R. (2007), Finance, inequality and the poor. *Journal of Economic Growth*.
- [4]. Bennett, J., & Bennett, L. (2003). A review of factors that influence the diffusion of innovation when structuring a faculty training program. *Internet and Higher Education*, 6 (2): 53-63.
- [5]. Bharati, P. and Chaudhury, A. (2009), “SMEs and Competitiveness: The Role of Information Systems”, *International Journal of E-Business Research*, 5(1):1-9
- [6]. Burns, A.C. (2010). *Research method*. Boston: McGraw-Hill Inc.
- [7]. Carter, C.W. (1998). An assessment of the status of the diffusion and adoption of computer-based technology in Appalachian College Association colleges and universities (Doctoral Dissertation, Virginia Polytechnic Institute and State University, 1998). ProQuest Digital Dissertations. (UMI No. AAT 9905169).
- [8]. Celina, L. (2012), “Agent Banking in Latin America,” by the National Banking and Securities Commission (CNBV) of Mexico, published by the Alliance for Financial Inclusion
- [9]. Central Bank of Kenya (2010), Agent Banking Knowledge Exchange, Nairobi, Kenya
- [10]. Central Bank of Kenya (2011), Bank Supervision Annual Report 2011
- [11]. CGAP (2010), Update on Regulation of Branchless Banking in Kenya, Nairobi, Kenya
- [12]. Chaia, A., Aparna, D., Golland, T. Gonzalez, H. J., Morduch, J. & Schiff, R. (2009). “Half the World is Unbanked.” *Financial Access Initiative Framing*
- [13]. Chen, Jason C., Chong, P. P., & Chen, Ye-Sho. 2001. Decision criteria consolidation: A theoretical foundation of pareto principle to porter's competitive forces. *Journal of Organizational Computing & Electronic Commerce*, 11(1): 1-14.
- [14]. Christen, R., Lauer, K., Lyman, T., & Rosenberg, R. (2011), A guide to regulation and supervision of
- [15]. Financial Sector Deepening. (2010). *Financial inclusion in Kenya*. Nairobi: FSD.
- [16]. Flaming, M., McKay, C., and Pickens, M. (2011) *Agent Management Toolkit; Building a Viable Network of Branchless Banking Agents*, Technical Guide CGAP.
- [17]. Forrester-Anderson, I. (2005). Prostate cancer screening perceptions, knowledge and behaviors among African American men: focus group findings. *Journal of Health Care Poor Underserved*, 22-30.



- [18]. G20 Financial Inclusion Experts Group (2010), Innovative Financial Inclusion
- [19]. Gardeva, A., and Rhyne, E. (2011), Opportunities and Obstacles to Financial Inclusion Survey Report, Center for Financial Inclusion.
- [20]. Gracias, R. (2010), Mexico's Financial Inclusion Strategy, Global Payments Week.
- [21]. Hannig, A., and Jansen, S. (2010), The AFI survey on financial inclusion policy in developing countries: Preliminary findings; Alliance for Financial Inclusion. Bangkok, Thailand.
- [22]. Jensen, M.C and Meckling W.H. (1976) Can the corporation survive? Center for Research in Government Policy and Business Working Paper no. PPS 76-4, University of Rochester, Rochester, NY (1976)
- [23]. Laffont, J., & Martimort, D. (2002), The theory of incentives: the principal-agent model, Princeton: Princeton University Press.
- [24]. Green, J. (2012), The Principal-Agent Relationship, Demand Media, Inc
- [25]. Jayanty, K. (2012), Agency Banking: Not Just About Banking the Unbanked, Infosys.com
- [26]. Keeler, R. (2011), Expanding Financial Services in Kenya: Agency Banking versus Mobile Banking, Ratio Magazine. The Inside Track to East Africa's Economies
- [27]. Keynes, J. M. (1936). The general theory of employment. interest and money. New York: Harcourt Brace and World.
- [28]. King, R., & Levine, R. (1993), Finance and growth: Schumpeter might be right. Quarterly Journal of Economics: 108(3).
- [29]. Kinyanjui, K. (2011), Money markets, agency banking runs into hurdles. BusinessDailyMonday, June 11, 2011.
- [30]. Lehman, J. (2010), Operational Challenges of Agent Banking Systems, Bill & Melinda Gates Foundation.
- [31]. Levine, R. (2005), "Finance and Growth" p. 82 in Aghion P. & S. N. Durlauf Handbook of Economic Growth. Volume 1A. North Holland: Elsevier.
- [32]. Walker, M. (2003), 'Principal/agency theory when some agents are trustworthy', Accounting and Finance Working Paper, Manchester: Manchester Business School, Manchester University.
- [33]. Waksberg, J. (1999). The role of sampling in population censuses: its effect on timeliness and accuracy. Demography. Technical paper No. 13.
- [34]. Mengo, B. (2012), Agency banking model fails to decongest Kenya's banking halls. Special Xinhua correspondent.
- [35]. Mugo, M. (2010), Agent Banking Knowledge Exchange, Central Bank of Kenya.
- [36]. Miller, M. (2009), Graduate Research Methods, Western International University
- [37]. Ndegwa, M. (2012), Money at your doorstep-Agency banking becoming a reality in Kenya. Standard Digital World
- [38]. Nurcan, T. C. (2005) Agency theory : an extended conceptualisation and reformation. PhD thesis, Queensland University of Technology.
- [39]. Nyarumba, J. (2011), Financial Focus, Nairobi, Price Waterhouse Coopers.
- [40]. Nzotta, S.M. (2014). Money, banking and finance: Theory and practice. Revised Edition. Owerri: Husdon-Judge Publication.
- [41]. Okpara, G. (2010). The cost of capital corporation and the theory of investment. American Economic Review, 32 (14).
- [42]. Orodho, J.A. (2004). Techniques of writing research proposals and reports in education and social sciences. Nairobi: Masola Publishers.
- [43]. Porter M.E. (1990) - The competitive advantage of the nations, Ed. The Free Press, A Division of MacMillan Press Ltd., New York.
- [44]. Risk Management Examination Manual for Credit Card Activities. (2007), Chapter 19, FDIC- Division of Supervision and Consumer Protection.
- [45]. Rogers, E.M. (2003). Diffusion of innovations (5th ed.). New York: Free Press.
- [46]. Shapiro, S. (2005), 'Agency theory'. Annual Review of Sociology.
- [47]. Stefan, J. (2010), Managing the Risks of Mobile Money: The Banking Agent Reform in Kenya A Scenario-Based Policy Analysis. Harvard University Center for International Development CID Working Paper No. 45
- [48]. Stephens, N., and Kevin, G. (1998). 'Why don't some people complain? A cognitive emotive process model of consumer complaint behavior.' Academy of Marketing Science Journal.
- [49]. Stiglitz, E. (2008), 'Principal and Agent.' The New Palgrave Dictionary of Economics. 2<sup>nd</sup> Edition.
- [50]. Tarazi, M. (2010), Who assumes the risk in branchless banking? CGAP: Consultative Group to Assist the Poor.
- [51]. The Center for the Enhancement of Teaching (2010). How to improve test reliability and validity: Implications for grading.
- [52]. Uchendu, O. A. (2010). Interest Rate Policy, Savings and Investment in Nigeria. Economic and Financial Review, 31(1).
- [53]. Wainaina, G. (2011), Agency banking to drive financial inclusion in Kenya, Nairobi
- [54]. World Bank. (2012). Financial Inclusion Data. Retrieved October 10, 2013, from The World Bank: <http://datatopics.worldbank.org/financialinclusion/country/kenya>

Pauline Mumbi Ndegwa. "An Analysis of the Effectiveness of Agency Banking As A Financial Inclusion Strategy in Commercial Banks (A Survey Of Selected Commercial Banks In Kiambu Town)." International Journal of Business and Management Invention(IJBMI), vol. 6, no. 8, 2017, pp. 67-75.