

**AN ASSESSMENT OF THE FACTORS INFLUENCING GROWTH OF AGENCY  
BANKING IN COMMERCIAL BANKS IN KENYA**

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**D61/71692/2008**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**OCTOBER 2013**

**DECLARATION**

This research project is my original work and has not been submitted for a degree award in any other university.

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## **ACKNOWLEDGEMENTS**

I thank the Almighty God for giving me the grace and strength for carrying out this study to completion. The successful completion of this work is also a combination of hard work, sacrifice and dedication not just on my part alone but on many other people, who in various ways gave me all the necessary support as I undertook this study. I would not have made it this far without your support and encouragement.

I would also extend my gratitude to my Supervisor, Mr. Mirie Mwangi who guided me through the project and whose positive criticism made the final product of this research and a better product that will enrich the body of knowledge in this field.

Thanks to my employer Kenya Commercial Bank Limited for financial assistance and creating an enabling environment that has facilitated the achievement of my MBA study.

Finally, I thank my entire family, Dad Nicholas and Mum Rose for being a source of positive influence and inspiration in my life.

May God bless you all.

## **DEDICATION**

This work is dedicated to my entire family, my Dad Nicholas and my Mum Rose for being a source of positive influence and inspiration in my life.

## ABSTRACT

This study sought to assess the factors influencing growth of agency banking within the Kenya banking industry. Agency banking was commissioned in Kenya in May 2010. The use of the agency banking model by banks in Kenya has continued to improve access to banking services and has also increased financial deepening in the country. The financial sector has recorded a tremendous growth with most Kenyans accessing finances at their convenience. This has reduced the cost of transaction and the time especially for the Kenyans in remote areas. The study was guided by the research objective which was to determine factors that affect growth of agency banking in Kenya. The study was a descriptive survey and the population consisted of all 13 commercial bank that had been licensed to offer agency banking in Kenya by September 2013. The variables included as predictors included: percentage agent commission, value of agent transaction, number of agent transactions, and number of bank customers. Multiple linear regression model was adopted to investigate relationship between predictor variables and number of bank agents. ANOVA analysis indicated that the model was significant for that data used ( $F_{4, 31}=1684.983$ ,  $p < 0.0005$ ). Regression analysis also established that all variables significantly influenced growth of agent banking in Kenya with  $p$ -value  $< 0.05$  for all predictor variables with their coefficient being positive as follows: 187.75 for Agency commission, 18.561 for value of agency transaction, 102.780 for number of agent transactions , and 644.836 for number of customers. The study established that agency banking has been growing significantly both in terms of number of agents and value of transactions. The growth rate is expected to be maintained as more and more banks within the industry enroll agents especially in remote arrears. It was also concluded that agents' commission, number of agent transaction, value of transactions and number of customers are among the factors that have contributed to growth of agent banking in Kenya. Finally, the study recommends that banking institutions embrace agency banking as an alternative to traditional branch banking. Secondly, banking institutions should review agency commission with an aim of making transactions done through agent more affordable to consumers. This will promote agency banking growth and reduce the banks operational cost.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ATMs</b>	-	Automated Teller Machines
<b>CBK</b>	-	Central Bank of Kenya
<b>CRBs</b>	-	Credit Reference Bureaus
<b>CGAP</b>	-	Consultative Group to Assist the Poor
<b>DTMs</b>	-	Deposit-Taking Microfinance Institutions
<b>ICT</b>	-	Information and Communication Technology
<b>MFC</b>	-	Mortgage Finance Company
<b>PIN</b>	-	Personal Identification Number
<b>POS</b>	-	Point of Sale
<b>SPSS</b>	-	Statistical Package of Social Sciences

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Informal banking system is as old as history. In the early days, Lawal and Abdulkadir (2010) pointed out that banking business was confined to safe-keeping of money and money lending. Complicated mechanism of banking did not exist. In virtually all countries of the world today, banking business has graduated from carrying out simple transactions to more complicated techniques involved in modern banking.

In the international competitive business setting, banks, among other organizations, have been facing a dynamic business environment that is technologically driven, globally unbounded, and customer oriented (Ignacio, 2009). Al-Mansour (2007) affirms that these challenges, among many others, have called for extensive search for suitable strategies to be adopted by organizations for growth and survival in the changing and turbulent marketplace. According to Agier and Assuncao (2009) new products, new markets and new regulatory systems have radically altered the environment in which financial sectors operate not only opening new profit opportunities but also creating new risks. Among the most important of these changes we have, is the worldwide movement of liberalization and deregulation of the banking industry (Pearce & Robinson, 1997).

Over the years, technology in business has been changing rapidly as the global environment becomes highly competitive and innovative. The use of Information and Communication Technology (ICT) has become very vital to businesses that intend to remain competitive in the

market. In the words of Cravens (2000), the drivers of change in today's world include, deregulation, global excess capacity, global competition, changing customer expectations, ICT, demographic shifts and changing work and lifestyles. These changes have led organizations to embark on activities that will provide a source of competitive advantage and embrace the usage of ICT.

According to Marketing Intelligence (2003), computerization in the Kenyan banking industry got off to a slow start and only picked up momentum in the 2000's. By linking up technological developments in telecommunications and Information Technology, real-time on-line electronic funds transfer came into existence. Today, commercial banks in Kenya have the privilege of various delivery channels for their products and services. These include the brick and mortar branch office networks, automated teller machines (ATM's), tele-banking or mobile banking via the telecommunication channel, internet banking and agency banking (Mwirigi, 2010).

Banks in the world over have continued to look for ways to reach their customers profitably. This has led banks to expand their networks by opening branches to extend their reach. However this is not feasible especially in areas where transaction volumes cannot justify the cost of setting up branches. To address this problem, banks are increasingly warming up to the idea of agency banking by partnering with local merchants to offer banking services that would otherwise be offered in the bank branches.

### **1.1.1 The Concept of Agent Banking**

Lyman *et al.* (2008) defined a banking agent as a retail outlet contracted by a financial institution to process clients' transactions. Ignacio (2008) states that rather than a bank branch teller, it is the owner or an employee of the retail outlet who conducts the transaction and lets clients deposit, withdraw, and transfer funds, pay their bills, inquire about an account balance or even get direct deposit from their employer. Globally, these retailers are increasingly utilized as important distribution channels for financial institutions.

Banking agents help financial institutions to divert existing customers from crowded branches to the agents thus providing convenience to the customers (Lyman *et al.*, 2008). Other financial institutions, especially in developing markets, use agents to reach an additional client segment or geography. Ivatury *et al.* (2008) states that, reaching poor clients in rural areas is often prohibitively expensive for financial institutions since transaction numbers and volumes do not cover the cost of setting up a branch. In such environments banking agents that piggy back on existing retail infrastructure and lower set up and running costs can play a vital role in offering many low income people their first-time access to a range of financial services (Lyman *et al.*, 2008; Ivatury *et al.*, 2008 & Ignacio, 2008). Aguirre *et al.* (2008) contend that developing an agent channel for a bank presents a range of technological and operational challenges that may be new for a bank. However, according to Siedek (2008) the main challenge to banks is strategic in nature that is understanding specifically how this new channel fits within its customer segmentation, service proposition, and branding objectives.

### **1.1.2 Growth Of Agent Banking**

The use of the agent banking model by banks in Kenya has continued to improve access to banking services and has also increased financial deepening in the country since it was launched in 2010. Since the inception of agent banking, the financial sector has recorded a tremendous growth with most Kenyans accessing finances at their convenience. This has reduced the cost of transaction and the time especially for the Kenyans in remote areas.

According to the Central Bank of Kenya report dubbed Development in the Kenyan Banking Sector for the Quarter ended 30th June, CBK had authorized 13 commercial banks to offer banking services through third parties (agents). Since 2010, a total of 19,649 agents had been contracted facilitating over 58.6 million transactions valued at Ksh. 310.5 billion. This was an increase from 11 banks that had contracted 18,082 active agents facilitating over 48.4 million transactions valued at Ksh. 250.1 billion in March 2013. The number of banking transactions undertaken through agents increased from 9.7 million registered in the quarter ending March 2013 to 10.2 million transactions registered in the quarter ending June 2013. Similarly, the value of banking transactions undertaken through agents increased from Ksh. 54.3 billion to Ksh. 60.4 billion over the same period. The increased number and value of transactions demonstrate the increased role of agent banking in promoting financial initiatives being championed by the Central Bank. (CBK, June 2013).

The increase is due to the fact that Banks and Financial related Institutions in Kenya are increasingly deploying the use of payments using agencies to enhance the quality of their financial services and increase growth. The pace of transformation in the financial sector speeded

up with more agent banking businesses realizing the potential of using the agencies in transacting payments in their service delivery. (CBK, June 2013).

### **1.1.3 Factors Influencing Growth of Agent Banking**

A study by Johnson (2011), showed that agent banking presented an opportunity for rapid expansion at minimal cost by leveraging on existing investments on the retail agents through information and communication technology. The study showed that the main factors that propelled agent banking adoption among commercial banks in Kenya were the prospects of cost reduction and customer service enhancement. There are huge savings on cost of construction on bank premises and leasing costs, and human resource costs. These factors have overall contributed to increased revenues to the banks. According to Daisy (2011), agent banking improves the banks geographical coverage and competitiveness so that the existing and potential customers can benefit from a greater level of convenience in accessing banking services.

In the expansion of agent banking, knowledge constraints are predictable and inevitable. According to Ngurukie (2007), the unbanked have no formal banking experience and usually a limited knowledge base about technologies. Moreover, research has found that even those who are ostensibly “banked” have limited knowledge of banking. Given that most mobile banking and agent banking services to date have largely targeted the banked, financial service providers will need to think carefully about how to pair the dissemination of appropriate knowledge with the spread of branchless/agent banking.

An agent network is indeed fundamentally a technology play for a bank. It is similar to the millions of existing Visa, Mastercard, and debit card merchants, except that in this case the card



payments at retail stores would be not only for sale of goods but also for handing out and taking in cash on behalf of banks. With appropriate technology, the bank (and, by extension, bank supervisors) can afford to be a little bit more relaxed about how customer transactions are captured—as they are with existing payment merchants. The costs of bank service distribution can be reduced, while still effectively controlling banking risks.

#### **1.1.4 Theoretical Relationship**

The use of the agent banking model by banks in Kenya has continued to improve access to banking services and has also increased financial deepening in the country since it was launched in 2010. Since the inception of agent banking, the financial sector has recorded a tremendous growth with most Kenyans accessing finances at their convenience. This has reduced the cost of transaction and the time especially for the Kenyans in remote areas. (CBK, 2013)

Banks have benefited a great deal at a time when most banks are working towards cost management. Some of these benefits are: Huge savings on cost of construction of bank premises and leasing costs when banks are using the Agency premises. Human Resource expenses have reduced. The banks do not have to employ new staff to manage the agency and the cost of training if any is to the bare minimum. Savings on equipment like furniture and computers.

Due to the fact that Banks and Financial related Institutions in Kenya are increasingly deploying the use of payments using agencies to enhance the quality of their financial services and increase growth, it is expected that the number of agents around the country would continue to grow especially with banks competing to sign them up. The number and value of transactions going through the agents will increase the role of agent banking in promoting financial inclusion and hence the overall growth of agent banking.

### **1.1.5 The Banking Sector In Kenya**

The banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and other various prudential guidelines issued by the CBK. As at 31st December 2012, the banking sector consisted of the Central Bank of Kenya (CBK), as the regulatory authority, 44 banking institutions (43 commercial banks and 1 mortgage finance company -MFC), 5 representative offices of foreign banks, 8 Deposit-Taking Microfinance Institutions (DTMs), 2 Credit Reference Bureaus (CRBs) and 112 Forex Bureaus. Out of the 44 banking institutions, 31 locally owned banks comprise 3 with public shareholding and 28 privately owned while 13 are foreign owned. The 8 DTMs, 2 CRBs and 112 forex bureaus are privately owned. The foreign owned financial institutions comprise of 9 locally incorporated foreign banks and 4 branches of foreign incorporated banks (CBK, 2013).

According to CBK, (2013), the banking sector total net assets stood at Ksh. 2.3 trillion as at 31st December 2012 and the 27 locally owned commercial banks accounted for 62.4 percent. The 13 foreign owned commercial banks accounted for 33.4 percent of the sector's net assets. During the year 2012, banks increased their branch network by 111, which translated to a total of 1,272 branches. The increase is an indication of increased provision of banking services. Nairobi County accounted for the highest number of new branches in 2012 as it recorded a growth of 53 branches. Kenyan commercial banks are classified into three peer groups using a weighted composite index that comprises assets, deposits, capital size, number of deposit accounts and loan accounts. A bank with a weighted composite index of 5 percent and above is classified as a large bank, a medium bank has a weighted composite index of between 1 percent and 5 percent while a small bank has a weighted composite index of less than 1 percent.

Despite the impressive growth in the sector, there still lay several challenges facing the banking sector. Key among these challenges are unequal distribution of income across the country, large numbers of qualified but, unemployed skilled labor workforce, the practical difficulties in lending to start-up businesses with limited management expertise and no collateral and adherence to increasing regulatory requirements aimed at maintaining the soundness of the Kenyan financial sector (CBK, 2013).

According to Hanna (2012), commercial banks in Kenya have grown over the last years. Kenyan banks have done a lot to be able to reach out to the poor. A few commercial banks such as the Kenya Commercial Bank and Equity Bank one of the leading commercial banks have been subject to a lot of international attention because of their success in reaching a large share of the previously unbanked population in Kenyan. The banks have taken many different measures in order to attract the poor and those living in remote areas and they have managed to expand into underdeveloped parts of the country to a significantly higher degree than other banks. Commercial banks in Kenya have exposed each other to increased competition, which has had a positive effect on access to banking services. In addition, domestic banks have proved to have a larger positive effect on access to bank accounts and have had a greater presence in underdeveloped areas than foreign banks (Allen *et al.*, 2011). Some banks are also providing financial training to their borrowers, where concepts like financial terms and what characterizes good and bad lending are explained.

## 1.2 Research Problem

The world has become closely integrated due to globalization and changes in technology. Deregulation and liberalization have opened up new opportunities for banks but at the same time the pressure of competition has led to narrowing spreads, shrinking margins, consolidation and restructuring. The increasingly competitive environment poses a challenge to banks with the last decade seeing a lot of changes in the world economy. As economic globalization intensifies competition and creates a climate of constant change, winning and keeping customers has become all but more important to businesses.

Banking agents are the backbone of agency banking, especially in remote and rural locations, where cash is still the most important way to make deposits and withdrawals. Agency banking was introduced to expand access to financial services, especially in remote areas where it has been expensive for banks to maintain a presence, owing to smaller volumes (Beck, Cull, Fuchs and Getenga, 2010). Other previous studies include; Abreu and Mendes (2002), Almogbil (2005), who did a study on banking the unbanked focusing on technology's role in delivering accessible financial services to the poor.

In Kenya, high proportion of the population is excluded from access to financial sector with the situation being grave in rural areas (Government of Kenya, 2005). In June 2009, the minister for finance proposed amendments to the Banking Act to allow commercial banks to use agents to offer branchless banking. This was set to change the financial landscape in Kenya dramatically and it was hoped that agency banking would offer a good alternative to the brick and mortar branch set up model (CBK, 2011). The agency banking service is dependent on banking agents to enable clients to effectively use the service (Siedek, 2008). Previous studies by Ivatury *et al.*

(2008) & Ignacio (2008) have shown that branchless or agency banking through agents can significantly reduce set-up and delivery costs. Agents can offer cash deposits and withdrawal services alone or a broader range of financial services such as utility bill payments to customers who are more comfortable transacting at their local merchants than at traditional bank branches.

A few studies attempting to shade some light on the subject under study are more general or have failed to give detailed insights and analysis on factors influencing growth of agency banking in Kenya. In his study, Kirika (2012) investigated the challenges facing commercial banks in implementing agency banking. The study found out that some of the main challenges facing commercial banks in implementing agency banking include; limit in maximum amount to deposit and withdraw, slow speed of customer adoption, ease of losing money to fraud, delays on transactions due to network failures, lack of enough agents for some areas especially rural areas, across banks transactions not available, lack of infrastructure and agents not having enough float (money). Although the study attained its objectives, it did not examine factors influencing growth of agency banking in Kenya. There is little published work on the factors influencing growth of agency banking, particularly in the context of developing countries in the dynamic African region and specifically in Kenya. It is this knowledge gap the study intends to bridge.

The study seeks to answer the following question; what are the factors that influence the growth of agency banking within the banking sector in Kenya?

### **1.3 Research Objective**

The objective of the study was to establish factors influencing growth of agency banking in Kenya.

### **1.4 Value of the Study**

Findings from the study will be beneficial to the following:

The study will be of importance to the bank's management in providing them with insights on agency banking that will enabling them to be more productive and profitable. These insights will contribute to the development of a robust regulatory framework for agent banking services in Kenya. They will also develop their market niches in line with their relative comparative advantages and strengths. In this scenario, the agent banking framework will play a complementary role for all financial players in the market.

The study will be significant to the banking industry, especially to decision makers involved in implementation of electronic services delivery strategies for their banks. Necessary improvements identified could be undertaken to enhance agency banking usage in Kenya. Further, commercial banks that are still hesitant to implement can use the findings of this research to clarify issues of prevalence and to get a greater insight into the adoption of agency banking in Kenya.

The regulators and the policy makers can use the finding as reference for policy guidelines on management and control of agency banking. They will be able to use the findings of the study to formulate viable policy documents that effectively address problems faced by commercial banks

in implementing agency banking. These may relate to regulating those aspects that threaten to adversely impact on the operations and development of such institutions. The findings of this study will enrich existing knowledge and hence will be of interest to both researchers and academicians who seek to explore and carry out further investigations. It will provide basis for further research.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This section reviews literature related to agency banking to establish the factors affecting growth of agency banking as well as the challenges faced by commercial banks in implementation of agency banking. The review is based on the theory of agency banking and other theories as done by scholars and also past studies on agency banking generally, both local and international.

### **2.2 Theoretical Framework**

#### **2.2.1 Agency Theory**

Agency theory postulates that the firm consists of a contract between the owners of economic resources (principals) and managers (agents) who are charged with using and controlling those resources. Furthermore, agency theory is based on the premise that agents have more information than principals and that this information asymmetry, adversely affects the principals ability to effectively monitor whether their interests are being properly served by the agents. It also assumes that principals and agents act rationally and that they will use the contracting process to maximize their wealth. This means that because agents have self-seeking motives they are likely to take the opportunity to act against the interests of the owners of the firm, for example allocating themselves huge pay perks.

The theory of agency was first explicitly modeled by Jensen and Meckling(1976) in their study of structure of the firm. Agency theory addresses all exchanges involving cooperative effort and delegation of work and decision making by one party (principal), to another party called agent. Jensen and Meckling describe an agency relationship as a contract (implicit or explicit) in which



one or more persons, the principal(s) engage another person, the agents, to take actions on their behalf. It thus involves delegation of some decision making authority to the agent. It is taken as unquestionable that an informed principal can benefit from this delegation to an informed agent and that it is in fact optimal for an uninformed principal to do so given their lack of skills, knowledge and experience.

The notion of agency is widely used in economics, legal and social sciences albeit with different comparable meaning. Human agents autonomously choose to engage relations with principals presumably because doing so promotes or does not conflict with their own interest. By engaging in agency banking relationship, however, an agent is bound to moral and legal rights that protect the interests of the principal through a legally enforceable contract entered into by both the principal and the agent.

Agency theory seeks to determine the most efficient contract governing the two parties, given its assumption about the parties, organization and its formation. In agency banking, the contracting bank is the principal while the retail outlet or shops are the agents.

### **2.2.2 Kane's Market Technology and Political Theory of Innovation**

Kane theory sees financial innovation as an institutions response to financial costs created by changes in technology, market needs and political forces particularly laws and regulations. Kane refers to the interactive process of regulation that follows institutional avoidance and innovations as dialectical process. The financial industry is special and has stricter regulations and therefore financial institutions have to deal with this regulation in order to reduce the potential risks to the minimum.

An example of Kane's theory where an institution responds to the changes in its operating environment is the rise of shadow banking in the United States. Economists believe the financial crisis was triggered by the shadow banking system. This parallel banking system especially caused the credit market to freeze due to lack of liquidity in the banking system.

Agency banking is the most modern financial innovation by commercial banks. A bank agent is retail or trading outlet contracted by a financial institution to process clients' transactions. Examples include supermarkets. The banking transactions carried out by these bank agents include cash deposits and withdrawals, account balance inquiries and utility bills payments.

### **2.2.3 Bank-focused Theory**

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

Banks must address the challenges posed by agency banking. Those factors as stated under research problem include agent networks, security, customer education and consumer trust. Banks must be extra careful about the agents they hire, and ensure that they uphold the required standards of delivery and conduct.

### **2.2.4 Bank-led Theory**

In the most basic version of the bank led theory of branchless banking, a licensed bank institution (typically a bank) delivers financial services through a retail agent. It is composed of a

sequence of three main entities; the bank, the retail agent, and the customer. That is, the bank develops financial products and services, but distributes them through retail agents who handle all or most customer interaction. In this model, the bank must carry out an audit of its agents to ensure that the agents operate within the generally accepted rules and regulations in order to safeguard the interests of the bank, agents and the customers.

### **2.2.5 Nonbank-led Theory**

The non-bank-led theory is where a bank does not come into the picture (except possibly as a safe-keeper of surplus funds) and the non-bank performs all the functions. In this theory therefore, customers do not deal with the bank, nor do they maintain a bank account. Instead customers deal with a non-bank firm, either a mobile network operator or prepaid card issuer and retail agents serve as point of customer contact.

## **2.3 Empirical Review**

In the recent past, there has been a surge of empirical studies that document the striking level of adoption of agency banking by the commercial banks to reach mostly the rural areas. Surveys and other empirical studies find that the lack of financial access depends foremost on background conditions where, not surprisingly, the institutional variable is crucial in providing information and solving agency problems. Empirical studies show that the solution for the poor is to rely on informal financial services which are more expensive than formal financial and often times unsafe (Coyle, 2007; Donner, 2007). By filling a financial vacuum for the poor it offers the possibility of gaining access to savings, micro-credits and receiving remittances.

Despite much international attention and enthusiasm from many development organizations and private businesses, agency banking does not provide a fit-for-all solution of financial inclusion (Ivatury & Pickens, 2008). Admittedly, the development of any agency banking scheme takes quite a lot of time and preparation because it implies analyzing and taking action regarding the business case of each actor involved, the customer value proposition, and the local legal and regulatory environment.

According to Consultative Group To Assist the Poor (CGAP) Technology Program (2007) in the paper; Banking the unbanked, which described the different approaches pioneers in Latin America have taken in establishing and managing network of banking agents and the benefits to the different actors involved, it was observed that banking agents increase customer convenience, productivity and efficiency, expands customer base and reduces upfront cost by leveraging on existing infrastructure. The study also observed that the cost of establishing and operating one branch is equal to 40 banking agents.

According to CGAP (2009), Brazil has the highest banking agent network in the world with more than 113,000 agents out of which close to 40,000 offer a broad range of banking services such as cash in, cash out, bill payments account opening and loan application. The study also found that agency banking in Brazil is both Bank based and Card based. The transactions happen at point of sale terminal at each agent location. The study concluded that the growing interest in agency banking was mainly as a result of reduced costs.

From literature reviewed, the major reason for the introduction of agency banking in many nations of the world is that, it is seen as a way of reaching the unbanked. The unbanked can

simply be described as those individuals that do not have any form of account with a bank. Anderson (2007) defined the unbanked as “diverse group of individuals who remain outside the banking mainstream for many reasons. Guatam (2008) stated that Africa has about 230million unbanked households. In the same vein, Ladipo (2008) revealed a survey carried out by EFINA that cuts across all the states of Nigeria over a five year period and with a sample based on national integrated survey of households, that 74% ( which is equivalent to 64 million people) of the adult population in the country have never been banked.

Chong (2008) also stated that low income earners see themselves as incredible for bank accounts. According to Anderson (2007), people remain unbanked in the U.S due to reasons which include: lack of understanding about the banking system, expectations for having a bank account, and lack of documentation needed to open a bank account. One of the most accepted solution to this problem is the shift from the branch based banking system to the adoption of the branchless banking system. Guatam (2008) opined that if the unbanked Africans cannot go to the bank, it is the bank that must reach out to them and this is only possible through agency banking. African banks are now moving closer to the 230million unbanked households in Africa’s rural areas through advanced satellite technologies (Guatam, 2008). Chong (2008) also revealed that, the rapid growth of agency banking is reducing the cost and expanding the availability of such service to those in developing countries who lack access to financial services.

Anderson (2007) also noted that, a way of reducing the number of unbanked people is through the adoption of advanced electronic technology (which leads to non-dependence on branches for financial services). The objectives of agency banking are achieved through “non-traditional

banking channel". These include delivery points (which are not distinct buildings). Among these channels are mobile phones and POS (Point of Sale Devices). The benefits of agency banking cannot be overemphasized. Through all these delivery channels, banks will increase their outreach to the unbanked, provision of banking services will not be limited to working hours and weekdays, long queues that are rampant in banking halls will be reduced, and loss of customer due to relocation of the customers from one area to another will be averted. Many other benefits can be derived from agency banking.

Mwirigi, (2010) contends that for bank customers, a major benefit of a branchless banking approach is the flexibility and proximity of banking services. The opportunity for a bank to work close to home is a key value from the customer's perspective (Prodhan, 2009). Since critical financial services, such as deposits and withdrawals, involve cash exchange, most agency banking options for banks are going to require cash-in and cash-out points. Siedek (2008) points out that to achieve a low-cost and pervasive landscape of cash-in/cash-out points a network of agents is required. This is true regardless of the type of technology solution deployed like point-of-sale (POS), mobile phone or a combination of both. Agents can either be employed by the financial institution or they can be independent third-parties, such as agents (Prodhan, 2009).

According to Ignacio (2008), agency banking strategies rely on agents that operate outside of bank branches. Agent banking is undoubtedly a necessity in Kenya. However, in comparison to Brazil and Colombia, Kenya suffers the following disadvantages; poor fixed line infrastructure, high incidence of fraud, insecurity-robberies, theft, carjacking, hijacking, level of technological literacy in rural areas still low, low financial education, poor transport system, few branches in

rural areas, insufficient cash flow in rural areas some areas may lack agents who meet financial qualifications, low penetration of credit and debit cards, low volumes of utility payment bills for electricity, water, telephone and other pressing social concerns such as poverty, drought, famine, banditry, diseases, unemployment. It is however noteworthy that these challenges are surmountable and once due attention is given to them, agent banking can still be implemented (CBK, 2009).

## **2.4 Summary of Literature Review**

The advent of the internet has revolutionized the way the firms in the financial industry conduct business, empowering organizations with new business models and new ways to offer 24 hour accessibility to their customers. The ability to offer financial transactions online has also created new players in the financial services industry such as agency banking, online banks, online brokers and wealth managers who offer personalized services, although such players still account for a tiny percentage of the industry (Lyman 2008).

Ignacio (2008) asserts that successful branchless business models must work not only for providers and end clients, but also for agents. Providers depend on the energy of agents for customer acquisition and for managing liquidity so as to support cash withdrawals and deposits. Successful providers therefore view their agents as an important category of customer, rather than a passive channel. These schemes have inter alia structured their commissions to make being an agent pay well. As the trend is shifting to agent banking, there is a challenge for owners and advisors of these banks to decide on how to leverage their investment in internet banking and offer branchless banking, in the shortest possible time.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology that was employed in this study and includes the research design, population and sampling criteria, data collection and data analysis.

### **3.2 Research Design**

Research design is a master plan that specifies the methods and procedures for collecting and analyzing needed information (Zikmund, 2003).

The research designed employed in this study was descriptive in nature. Thus the study used a survey design to assess the factors that have influenced the growth of agent banking in Kenya since it was launched in May 2010.

### **3.3 Population**

According to Orodho (2003) a population is a well defined or set of people, services, elements, events, group of things or household that are being investigated. The research targeted all commercial banks in Kenya which have already implemented agency banking. According to Central Bank of Kenya (2013), there were thirteen commercial banks which had already been approved to offer agent banking but only eight had implemented agent banking in Kenya by September 2013.

### **3.4 Sample Design**

No sample design was used since consolidated data of all commercial banks which have fully implemented agency banking in Kenya was collected from CBK and analyzed to arrive at the findings of the study.



### **3.5 Data Collection**

The study relied purely on secondary data. Secondary data was gathered from the central bank of Kenya, and various internet search engines covering the factors influencing growth of agency banking. However, data for the individual banks was not entirely available for the period of study because central bank reports consolidated data only and different banks had rolled out agency banking service at different times. Including data for individual banks was found to also comprise independence of predictor variables because most banks were reporting zero values in the period that was studied. Therefore, data for individual banks was excluded from analysis and only consolidated data was used.

### **3.6 Data Analysis and Presentation**

Data is a collection of facts and figures relating to a particular activity under study. For data to be useful it has to provide answer to the research questions. Data analysis is defined a whole process, which starts immediately after data collection and ends at the point of interpretation and processing of results.

The process of data analysis involved data clean up and explanation. Data was analyzed using descriptive statistics, with the use of SPSS package, version 17. Multiple linear regression model expressed below was adopted to investigate relationship between predictor variables and number of bank agents.

$$Y = \alpha + \beta x_1 + \beta x_2 + \beta x_3 + \beta x_4 + e$$

Where

$\alpha$  was autonomous function

$\beta$  was the co-efficient of explanatory variables

$e$  was the error term used to absorb the noise for any other factors not captured in the model.

$Y$ = Total number of Agents from May 2010 to September 2013. The figures were obtained from CBK reports of up to September 2013.

$X_1$ = Commission paid by bank to agent as a percentage of transaction value.

$X_2$ = The value of the transactions from agent banking. The figures were obtained from CBK reports of up to September 2013.

$X_3$ = The total number of Agent Transactions obtained from CBK reports of up to September 2013.

$X_4$ = The total number of customers of the bank. The figures were obtained from CBK reports of up to September 2013.

The data was recorded in a tabular form for each Month starting from May 2010 to September 2013. The data is presented in Appendix B.

An independent samples t-test was used to test whether the coefficients of independent variables are significantly different from zero. The confidence level was set to be 95% and therefore the null hypothesis that  $\beta=0$  is to be rejected if the  $p<0.05$ . Moreover, ANOVA F-test was also used to test whether independent variables together significantly predicted the independent variable at 95% confidence level.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS**

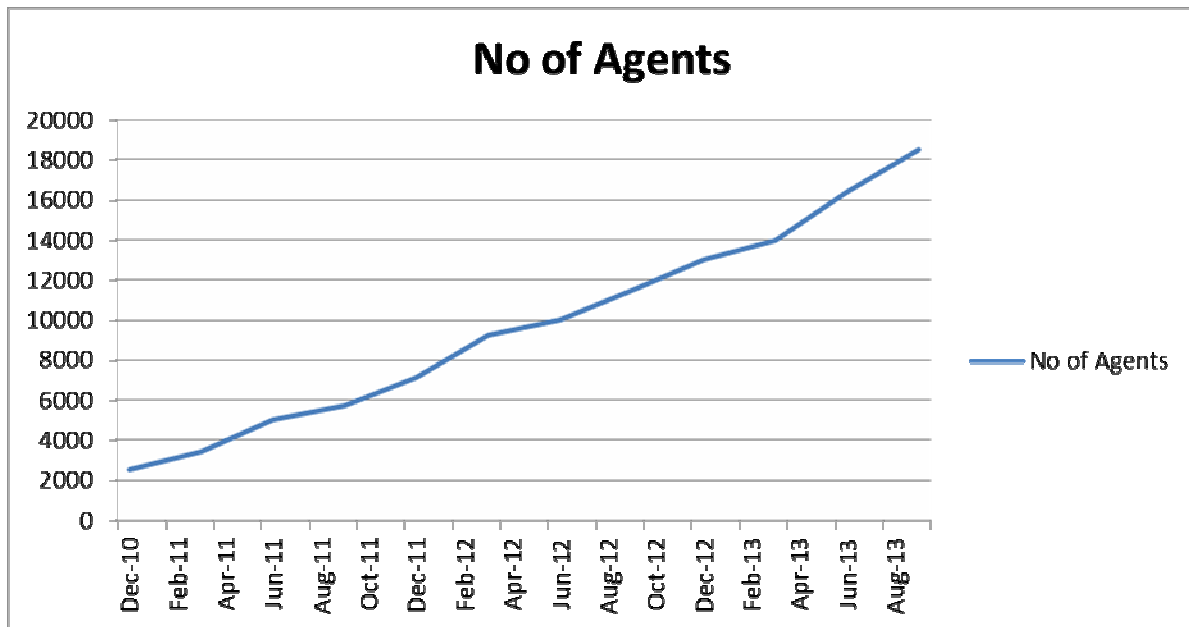
### **4.1 Introduction**

The purpose of the study was to identify some factors that influence growth of agent banking in Kenya. This chapter focuses on findings of the study in relation to research objective and our research question. Secondary data regarding number of agents and independent factors that might have influenced growth was gathered from the central bank of Kenya, and various internet search engines. Correlation and multiple linear regression analysis were conducted using SPSS version 17 to determine the relationship between study variables and to fit regression model. It was established that agency commission, value of transactions, number of agent transactions, and number of bank customers all significantly influenced growth in number of bank agents over the study period that was October 2010 to September 2013.

### **4.2 Growth of Agency Banking**

The use of the agency banking model by banks in Kenya has continued to improve access to banking services and has also increased financial deepening in the country since its inception in the year 2010. Since the inception of agent banking, the financial sector has recorded a tremendous growth with most Kenyans accessing finances at their convenience. This has reduced the cost of transactions and the time especially for the Kenyans in remote areas. The graph 4.1 below shows that the numbers of agents have grown significantly since the service was launched in 2010.

**Figure 4.1 Trend in the number of Bank Agents**



**Source: Collected data**

### **4.3 Data Analysis and Presentation of Findings**

#### **4.3.1 Variable Description**

The objective of the study was to establish some factors influencing growth of agency banking in Kenya. Having established in the previous section that agency banking has been on the rise both in volume of transactions and number of agents, the table 4.1 below summarizes description of both independent variables and dependent variable used in this study.

**Table 4.1 Variable Description**

<b>VARIABLE NAME</b>	<b>VARIABLE DESCRIPTION</b>	<b>MODEL NOTATION</b>
Total number of Agents	Total number of Agents	Y
% Agent commission	Commission paid by bank to agent as a percentage of transaction value	X <sub>1</sub>
Total value of the transactions	The value of the transactions from agent banking expressed as a percentage of the banks income	X <sub>2</sub>
Total no. of agent transactions	The total number of Agent Transaction	X <sub>3</sub>
Total number of customers of the bank	The total number of customers of the bank	X <sub>4</sub>

The linear regression model of the form  $Y = \alpha + \beta x_1 + \beta x_2 + \beta x_3 + e$  was studied to identify the relationship between number of bank agents and independent variables.

#### **4.3.2 Correlation Analysis**

In order to determine the relationship between study variables, correlation analysis of variables established that there existed significant relationship between the number of bank agents and all independent variables with p-value <0.05 for all variables. All independent variables had positive correlation with the number of bank agents except for agent commission indicating that as the number of bank customers, number of agent transactions and value of transactions increased, the number of agents tend to increase as well. However, agents' commission had negative

correlation with number of bank agents. The correlation matrix table 4.2 summarizes the relationships.

**Table 4.2 Correlation matrix**

	Number of Agents	% Agent Commission	Total value of Agent Transactions	Total number Transactions	No of Bank Customers
Number of Agents	1	-0.568	0.986	0.991	0.988
% Agent Commission	-0.568	1	-0.597	-0.627	-0.625
Total value of Agent Transaction	0.986	-0.597	1	0.981	0.969
Total number Transaction	0.991	-0.627	0.981	1	0.984
No of Bank Customers	0.988	-0.625	0.909	0.984	1

**Source: Excerpt of SPSS output**

When performing a multiple linear regression it is important to ensure that predictor variables are relatively independent. The above result indicates those predictor variables are relatively independent with exception of total value of transactions and number of agent transactions that are highly correlated.

### 4.3.3 Regression Analysis

A multiple linear regression analysis was conducted to evaluate how well agent commission, value of transactions, number of agent transactions and number of bank customers predicted total number of bank agents. The coefficient of determination for the model was 0.995. Multiple correlation analysis indicated that 99.5% (Adjusted  $R^2=0.995$ ) variance of number of bank

agents can be accounted for by the linear combination of predictor variables. The results of the linear regression of all the variables against growth are shown in Table 4.3 below.

**Table 4.3 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998 <sup>a</sup>	.995	.995	367.004

a. Predictors: (Constant), NO. OF BANK CUSTOMERS M, % AGENT

COMMISSION, TOTAL VALUE OF TXNS (KSHSB), TOTAL NO. OF AGENT TRANSACTIONS

b. Dependent Variable: NO OF AGENTS

**Source: SPSS output**

The F-ratio in the ANOVA analysis indicated that the model was a good fit for the data used.

The linear combination of predictor variables was significantly related to number of bank agents (F4, 31=1684.983,  $p < 0.0005$ )

**Table 4.4: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.078E8	4	2.270E8	1684.983	.000 <sup>a</sup>
	Residual	4175451.704	31	134691.990		
	Total	9.120E8	35			

a. Predictors: (Constant), NO. OF BANK CUSTOMERS M, % AGENT COMMISSION, TOTAL VALUE OF TXNS (KSHSB), TOTAL NO. OF AGENT TRANSACTIONS

b. Dependent Variable: NO OF AGENTS

**Source: SPSS output**

Regression analysis also established that all variables significantly influenced growth of agent banking in Kenya with p-value <0.05 for all predictor variables. The unstandardized and standardized Coefficient (beta) of each variables and level of significance are detailed in the SPSS output table below.

**Table 4.5 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	-7274.457	1381.737		-5.265	.000
% AGENT COMMISSION	187.748	35.712	.083	5.257	.000
TOTAL VALUE OF TXNS(KSHSB)	18.561	3.831	.306	4.845	.000
TOTAL NO. OF AGENT TRANSACTIONS	102.780	24.623	.372	4.174	.000
NO. OF BANK CUSTOMERS M	644.836	119.404	.376	5.400	.000

a. Dependent Variable: NO OF AGENTS

**Source: SPSS output**



#### **4.4 Discussion of Factors Influencing Growth of Agency Banking**

Regression analysis indicated that all predictor variables significantly contributed to growth of agency banking and all had positive coefficients.

Agency commission had a positive coefficient of 187.75 which was significant at  $p < 0.05$ . This indicated that the commission that agents earned positively influenced growth of agency banking. However, it had the least impact as compared with other variables. A one standard deviation change in the agency commission would result in a 0.083 standard deviation change in the number of banking agents. The low impact can be attributed to the fact that agency commission slightly declined probably caused by the fact that banking institution must balance between affordability of the service and profitability of their agents. However the decline was small with standard deviation of 2.2%. In addition, lower agent commission was a factor that positively influenced adoption of agency banking since it promoted affordability of the service to the bank customers.

Value of agency transaction also had a positive coefficient of 18.561 which was significant at  $p < 0.05$ . This implied that the value of agency transactions positively influenced growth of agency banking. A one standard deviation change in value of transaction resulted 0.303 standard deviation change in the number of banking agents. The impact can be attributed to several factors among them: increased public awareness in agency banking services, increased commission that agents earn leading to more outlets enrolling to become bank agents and relatively low transaction charges to the consumers.

Regression result also indicated that total number of transaction had a positive coefficient of 102.780 and that it was significant at  $p < 0.05$ . This implied that as the total number of transactions increased, the number of agents also increased. The standardized coefficient (Beta) for this variable was 0.372. The reason for such significant contribution can be explained by the same results indicated above for value of agent transactions.

Finally, the number of customers was also found to significantly influence growth in the number of agents within the period of study. The regression coefficient for the said variable was the highest at 644.836 which was significance at  $p < 0.05$ . Number of customers was found to have the greatest impact on the growth of agency banking with a beta value of 0.376. The contribution of increase in number of customers to predict number of agents is in agreement with a study conducted by Wambugu (2011) that concluded that growing numbers of customers is a factor that influences adoption of agency banking in Kenya. The findings are also consistent with the main objectives of establishing agency banking which was diversify channels through which increasing numbers of bank customers can access banking services at lower operational cost while at the same time reaching the un-banked Anderson (2007). The lengthy queues experienced at the banking halls, few number of bank branches especially in remote areas Mwirigi, (2010) and convenience are among the reasons why customers are opting for agent banking rather than going to bank branch.

We therefore conclude that the linear model to predict the growth in number of bank agents would take the form  $Y = \alpha + 187.748 x_1 + 18.561 x_2 + 102.780 x_3 + 644.836 x_4 - 7274.457$

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

In the previous chapter, results of data analysis were tabled and findings of the study were presented and discussed in details. This chapter provides a summary of the study together with conclusions that were drawn and recommendation made based on findings. Limitations of the study are described and possible avenues of future research are mentioned.

### **5.2 Summary of Findings and Interpretations**

The objective of the study was to determine factors that might contribute to the growth of agency banking in Kenya. The study took a descriptive survey design to gather, summarize, present and interpret data for the purpose of answering the research question. The population consisted of all 8 commercial banks that had been licensed and implemented agency banking in Kenya by September 2013.

The study relied on secondary data gathered from central bank of Kenya and various other sources including commercial bank websites and search engines. Four independent variables were under consideration as possible predictors of the increase in number of bank agents. The variables included: percentage agent commission, value of agent transactions, number of agent transactions, and number of bank customers. Multiple linear regression model was adopted to investigate relationship between predictor variables and number of bank agents.

ANOVA analysis indicated that the model was significant for that data used ( $F_{4, 31}=1684.983$ ,  $p < 0.0005$ ). Regression analysis also established that all variables significantly influenced growth of agent banking in Kenya with  $p$ -value  $< 0.05$  for all predictor variables with their coefficient

being positive as follows: 187.75 for Agency commission, 18.561 for value of agency transaction, 102.780 for number of agent transactions , and 644.836 for number of customers.

Agency commission was found to have the least impact on the number of agents with its standardized  $\beta=0.083$  while the number of customers contributed the most to the number of agents with its standardized  $\beta=0.376$ .

### **5.3 Conclusions and Recommendations**

From the findings, it can be concluded that agency banking has been growing significantly both in terms of number of agents and value of transactions. The growth rate is expected to be maintained as more and more banks within the industry enroll agents especially in remote areas. It was also concluded that agents' commission, number of agent transactions, value of transactions and number of customers are among the factors that have contributed to growth of agent banking in Kenya. Finally, the linear model developed using the research variables cannot be generalized since other factors not included may have significant impact on growth of agency banking as well.

Based on the findings of the study, several recommendations of interest to the banking institutions and regulators were made. Firstly, as agency banking grows over time, banks that will have enrolled more agents will gain competitive advantage in growing and maintaining customers. It is therefore recommended that banking institutions embrace agency banking as an alternative to traditional branch banking. Secondly, banking institutions should review agency commission with an aim of making transactions done through agent more affordable to consumers. This will promote agency banking growth and reduce the banks operational cost.

Finally, as both the volume and value of transaction grows, vetting of agents before enrolling them will be paramount to ensure that risk of financial loss and money laundering are minimized.

#### **5.4 Limitations of the Study**

The researcher used secondary data; the accuracy of the data from central bank of Kenya relied on information passed on by participating commercial banks. It was therefore assumed that the data was accurate. There are also many variables both quantitative and qualitative that could have been included in the model.

The researcher only used quantitative data and therefore the effects of other factors were not established. Co-linearity effect of predictor variables could not be ruled out. Better conclusion could have been made if the predictor variables were perfectly independent. Finally, the researcher used consolidated data for participating banks since not all banks rolled agency banking at the same time and individual banks data could not be gathered for secondary sources. More accurate result could have been obtained if segregated data had been used.

#### **5.5 Suggestions for Further Research**

There are numerous factors that may collectively affect growth of agency banking. This study focused on few quantitative variables as predictors, a researcher may be interested to conduct similar study but incorporate more variables such as: agency banking service availability and reliability, age and educational levels of agent banking users, banking regulations, and availability of infrastructure.

A researcher may also be interested to conduct a research study on the impact agency banking to economic growth. This can be done by examining relationship between the number of agents and the levels of economic growths in a given region. A research may also be conducted to evaluate benefits of agency banking to commercial banks in terms of profit and cost reduction.

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## **APPENDICES**

### **APPENDIX A: LIST OF BANKS THAT HAVE IMPLEMENTED AGENCY BANKING**

1. KENYA COMMERCIAL BANK LTD
2. EQUITY BANK LTD
3. CO-OPERATIVE BANK OF KENYA LTD
4. DIAMOND TRUST BANK
5. CONSOLIDATED BANK OF KENYA LTD
6. POSTBANK LTD
7. FAMILY BANK LTD
8. CHASE BANK LTD

**APPENDIX B: AGENCY BANKING DATA (SOURCE, CBK)**

MONTH	NO. OF AGENTS	% AGENT COMMISSION	TOTAL VALUE OF TRANSACTIONS(KSHS B)	TOTAL NO. OF AGENT TRANSACTIONS (M)	NO. OF BANK CUSTOMERS( M)
Oct-10	0	0.00	0.00	0.00	11.3
Nov-10	0	0.00	0.00	0.00	11.65
Dec-10	2527	9.92	7.07	1.02	12.01
Jan-11	2694	8.66	22.00	4.54	12.19
Feb-11	3350	7.60	32.00	4.70	12.34
Mar-11	3403	6.60	40.10	5.96	12.34
Apr-11	4006	5.86	59.10	6.02	12.72
May-11	4312	5.80	65.20	8.58	12.84
Jun-11	5020	5.74	67.20	17.00	12.95
Jul-11	5390	5.12	75.30	17.60	13.14
Aug-11	5486	5.07	92.30	17.10	13.35
Sep-11	5725	4.33	93.30	18.10	13.38
Oct-11	6974	3.76	99.30	22.50	13.75
Nov-11	6996	3.45	107.00	22.30	14.75
Dec-11	7157	3.39	107.00	22.30	15.06
Jan-12	7689	3.29	118.00	27.80	15.39
Feb-12	8889	3.05	118.00	28.10	15.78
Mar-12	9204	3.04	125.00	30.70	15.98
Apr-12	9808	2.93	134.00	33.80	16.18
May-12	9966	2.70	134.00	33.20	16.32
Jun-12	10018	2.70	137.00	34.80	17.04
Jul-12	10117	2.68	142.00	34.30	17.28
Aug-12	11353	2.66	144.00	36.10	17.3
Sep-12	11457	2.57	159.00	36.40	18.08
Oct-12	11952	2.44	171.00	37.40	18.08
Nov-12	12367	2.39	174.00	38.30	18.24
Dec-12	13039	2.37	186.00	39.30	18.28
Jan-13	13575	2.36	189.00	45.70	18.33
Feb-13	13639	2.14	190.00	46.20	18.65
Mar-13	13995	2.10	219.00	49.00	19.11
Apr-13	14474	1.93	228.00	51.60	19.71
May-13	15920	1.86	229.00	55.60	19.73
Jun-13	16413	1.34	271.00	57.50	19.97
Jul-13	17676	1.34	285.00	57.90	20.21
Aug-13	17754	1.32	306.00	59.10	20.67
Sep-13	18503	1.28	310.00	59.80	20.84

**APPENDIX C: SPSS OUTPUT FOR CORRELATION AND REGRESSION ANALYSIS**

CORRELATIONS /VARIABLES=NOOFAGENTS AGENTCOMMISSION TOTALVALUEOFTXNSKSHSB  
 TOTALNO.OFAGENTTRANSACTIONS NO.OFBANKCUSTOMERSM /PRINT=TWOTAIL NOSIG  
 /MISSING=PAIRWISE.

**Correlations**

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05)  
 POUT(.10) /NOORIGIN /DEPENDENT NOOFAGENTS /METHOD=ENTER AGENTCOMMISSION  
 TOTALVALUEOFTXNSKSHSB TOTALNO.OFAGENTTRANSACTIONS NO.OFBANKCUSTOMERSM  
 /RESIDUALS HIST(ZRESID) NORM(ZRESID).

**Correlations**

		NUMBER OF AGENTS	% AGENT COMMISSION	TOTAL VALUE OF TRANSACTIONS (KSHSB)	TOTAL NUMBER OF AGENT TRANSACTIONS	NUMBER OF BANK CUSTOMERS
NO OF AGENTS	Pearson Correlation	1	-.568**	.986**	.991**	.988**
	Sig. (2- tailed)		.000	.000	.000	.000
	N	36	36	36	36	36
% AGENT COMMISSION	Pearson Correlation	-.568**	1	-.597**	-.627**	-.625**
	Sig. (2- tailed)	.000		.000	.000	.000
	N	36	36	36	36	36
TOTAL VALUE OF TXNS(KSHSB)	Pearson Correlation	.986**	-.597**	1	.981**	.969**
	Sig. (2- tailed)	.000	.000		.000	.000
	N	36	36	36	36	36
TOTAL NO. OF AGENT TRANSACTIONS	Pearson Correlation	.991**	-.627**	.981**	1	.984**
	Sig. (2- tailed)	.000	.000	.000		.000
	N	36	36	36	36	36

NO. OF BANK CUSTOMERS M	Pearson Correlation	.988**	-.625**	.969**	.984**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	36	36	36	36	36

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

## Regression

### Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	NO. OF BANK CUSTOMERS M, % AGENT COMMISSION, TOTAL VALUE OF TXNS(KSHSB), TOTAL NO. OF AGENT TRANSACTIONS <sup>a</sup>		Enter

a. All requested variables entered.

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998 <sup>a</sup>	.995	.995	367.004

a. Predictors: (Constant), NO. OF BANK CUSTOMERS M, % AGENT COMMISSION, TOTAL VALUE OF TXNS (KSHSB), TOTAL NO. OF AGENT TRANSACTIONS

b. Dependent Variable: NO OF AGENTS

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.078E8	4	2.270E8	1684.983	.000 <sup>a</sup>
	Residual	4175451.704	31	134691.990		
	Total	9.120E8	35			

**Variables Entered/Removed**

Model	Variables Entered	Variables Removed	Method
1	NO. OF BANK CUSTOMERS M, % AGENT COMMISSION , TOTAL VALUE OF TXNS(KSHSB), TOTAL NO. OF AGENT TRANSACTIONS <sup>a</sup>		. Enter

a. Predictors: (Constant), NO. OF BANK CUSTOMERS M, % AGENT COMMISSION, TOTAL VALUE OF TXNS (KSHSB), TOTAL NO. OF AGENT TRANSACTIONS

b. Dependent Variable: NO OF AGENTS

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-7274.457	1381.737		-5.265	.000
	% AGENT COMMISSION	187.748	35.712	.083	5.257	.000
	TOTAL VALUE OF TXNS(KSHSB)	18.561	3.831	.306	4.845	.000
	TOTAL NO. OF AGENT TRANSACTIONS	102.780	24.623	.372	4.174	.000
	NO. OF BANK CUSTOMERS M	644.836	119.404	.376	5.400	.000

a. Dependent Variable: NO OF AGENTS



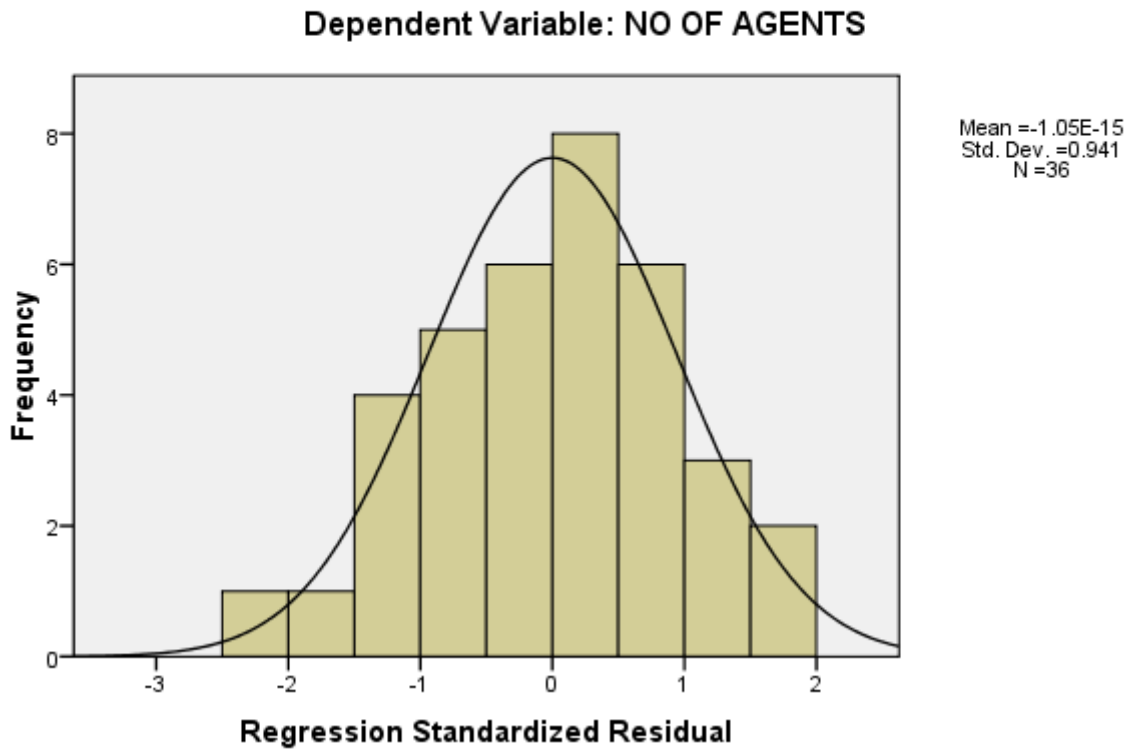
### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	12.20	18305.41	9190.22	5092.894	36
Residual	-859.305	589.718	.000	345.396	36
Std. Predicted Value	-1.802	1.790	.000	1.000	36
Std. Residual	-2.341	1.607	.000	.941	36

a. Dependent Variable: NO OF AGENTS

## Charts

### Histogram



**Normal P-P Plot of Regression Standardized Residual**

**Dependent Variable: NO OF AGENTS**

