THE EFFECT OF MOBILE BANKING ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

This Research project is my original work and has not been submitted to any Institution or University for examination.

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This research project has been presented for examination with my approval as the University supervisor.

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DEDICATION

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LIST OF ABBREVIATIONS

ANOVA	-	Analysis of Variance
ATM	-	Automated Teller Machine
CAR	-	Capital Adequacy Ratio
CBK	-	Central Bank of Kenya
GDP	-	Gross Domestic Product
ICT	-	Information Communication Technology
IT	-	Information Technology
MBS	-	Mobile Banking Services
NIC	-	National Industrial Corporation
ROA	-	Return on Assets
ROE	-	Return on Equity
SMS	-	Short Message Service
SSA	-	Sub-Saharan Africa
SPSS	-	Statistical Package for Social Sciences

ABSTRACT

Mobile banking is a service provided by financial institutions in cooperation with mobile phone operators. It allows customers with busy lives to conveniently do their banking using their phones anytime. It is about getting banking services to the unbanked, those who do not have bank access or bank accounts, and those who are at the bottom of the economic pyramid, often living in remote areas. The study sought to determine the effect of mobile banking on financial performance of commercial banks in Kenya. Cross sectional descriptive survey was employed in this case. This informed who, how and what about the mobile banking in commercial banks in Kenya and as a one-time event. The study adopted a census method where all the commercial banks practicing mobile banking in Kenya were studied. The study made use of secondary data from the Audited Financial statements of the Banks, those deposited at the Nairobi Securities Exchange and financial performance data from CBK annual banking survey reports. The data collected was cleaned, coded and systematically organized in a manner that facilitates analysis using the Statistical Package for Social Sciences (SPSS). Quantitative analysis was analyzed through descriptive statistics such as measure of central tendency that generated relevant percentages, frequency counts, mode, and median and mean where possible. To test for the strength of the model and the effects of mobile banking on the financial performance of commercial banks in Kenya, the study conducted an Analysis of Variance (ANOVA). From the regression model, the study found out that there were mobile banking variables influencing the financial performance of commercial banks in Kenya, which are annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency. They influenced it positively. The study found out that the intercept was 1.076 for all years. The six independent variables that were studied (annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency) explain a substantial 75.1% of financial performance of commercial banks in Kenya as represented by adjusted R^2 (0.751). The study therefore concludes that mobile banking positively and significantly affects the financial performance of commercial banks in Kenya. The study recommends that policy makers consider mobile banking in their formulation of policies because of the technological developments and the expected switch from physical branch networks to technologically supported banking services.The study further recommends that commercial banks keep adopting and using mobile banking in their operations because the number of people with access to a mobile hand set is increasing every day.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Mobile communication is progressing rapidly, extending the range of possibilities that can be achieved through mobile telephony. Today the mobile phone is not just another communication device between two parties. It is now being used in business applications especially with the introduction of Third Generation (3G) mobile phones which not only transmit voice and text messaging but also video streaming infotainment, multimedia messaging, location services, online banking and financial services, online shopping and internet browsing, (Zift, 2006). Mobile phones have come to represent a new era of secure electronic mobile commerce (Black, Lockett, Ennew, Winklhofer&McKechnie, 2005).

The financial services industry has recently been open to historic transformation. So-called E-developments are emerging and advancing rapidly in all areas of financial intermediation and financial markets. E-finance, E-money, E-banking, E-brokering, E- insurance, E-exchanges and even E-supervision. The new information technology is turning into the most important factor in the development of banking, (Daniel, 1999; Mols, 1998; Sathye, 1999: Burr, 1996).

The revolution of information technology has influenced almost every facet of life, among them is the banking sector. The introduction of electronic banking has revolutionized and redefined the way banks were operating. As technology is now considered as the main contribution for the organizations' success and as their core competencies. So the banks, be it domestic or foreign are investing more on providing customers with the new technologies through mobile banking.

Technological advancement has not only affected the way of living but has had an effect on the way people do their banking. The last decade, has seen an incredible upsurge in mobile penetration in the developing world.

However of great interest is that while the mobile phone offers several features including the possibility of mobile banking, almost half of the world populations have either failed to embrace mobile banking and financial services or they have been deprived of the same. Back in Kenya the scenario is no better. Astonishingly half of the Kenyan populations especially the rural folk do not have a clue on mobile banking. However, the outreach of the mobile banking sector has been found to vary across country (Ivatury& Mas, 2008).

The Kenya Bureau of Statistic Report (2011) indicates that more than 7 million adult rural Kenyans are either under-banked or unbanked. This is partly because of the high cost of maintaining the bank branches and the low nature of business transactions in rural Kenya - a situation which makes opening of new branches in the rural areas a less productive venture. At yet another level mobile technology has substantially penetrated rural Kenya and is likely to be on an upward trend in the near future. Banks and other financial institutions which have traditionally relied on physically established branches to provide banking services are now gearing towards the adoption of mobile banking services (MBS) as a form of branchless banking. This has the consequence of lowering cost of banking. Technology has therefore created greater opportunities to service providers to offer great flexibility to the customers. To this end banks are fast developing branchless banking such as ATM, internet and mobile banking among others (Laukkanen&Pasanen, 2007).

1.1.1 Mobile Banking

Mobile banking is a service provided by financial institutions in cooperation with mobile phone operators. It allows customers with busy lives to conveniently do their banking using their phones anytime. It is about getting banking services to the unbanked, those who do not have bank access or bank accounts, and those who are at the bottom of the economic pyramid, often living in remote areas. They receive the benefits of banking services such as being able to save and borrow in a cost-efficient and secure way. The services include opening bank accounts, viewing account balances, making cash transfers between accounts, or paying bills via a mobile device. In recent time Mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs downloaded to the mobile device (Salzaman, Palen& Harper, 2001).

In recent years, banks, payment system providers, and mobile operators have begun experimenting with branchless banking models which reduce costs by taking small-value transactions out of banking halls into local retail shops, where agents such as airtime vendors, gas stations, and shopkeepers, register new accounts, accept client deposits, process transfers, and issue withdrawals using a client's mobile phone then communicate transaction information back to the telecommunication provider or bank. This enables clients to send and receive electronic money wherever they have cell coverage. They need to visit a retail agent only for transactions that involve depositing or withdrawing cash (Salzaman, Palen& Harper, 2001).

The banking sector has had to adopt technological change to remain competitive. In search of competitive advantages in the technological financial service industry, banks have acknowledged value and differentiated themselves from others financial

institution through new service distribution channels (Daniel 1999). Banks bureaucratic process of account opening cut out many rural poor as they could not qualify to own accounts. With competition banks had to simplify the process and had to come up with innovative ways of doing so. Quite a number of banks have innovated various M-banking products for example Equity bank M-Kesho, KCB Mobibank, Family bank Pesa pap and more recently M-shwari of Commercial bank of Africa.

Mobile banking provides a number of advantages for both banks and customers. Mobile banking removes geographical limitation to customers and therefore bringing convenience. There is no time limitation i.e. banking maybe performed throughout the day and in any place. Mobile banking also provides efficient cash management and security of cash.

1.1.2 Financial Performance

Firm performance is a multidimensional construct that consists of four elements (Alam et al., 2011). Customer-focused performance, including customer satisfaction, and product or service performance; financial and market performance, including revenue, profits, market position, cash-to-cash cycle time, and earnings per share; human resource performance, including employee satisfaction; and organizational effectiveness, including time to market, level of innovation, and production and supply chain flexibility. Consistent with the theoretical foundations in the capabilities and resource-based perspectives, it is argued that organizational capabilities are rent-generating assets, and they enable firms to earn above-normal returns. For example, performance management capability influences various measures of firm performance

by allowing business leaders to review and take corrective actions on any potential or actual slippages proactively and in a timely manner (Athanasoglou et al., 2008).

Simply stated, much of the current bank performance literature describes the objective of financial organizations as that of earning acceptable returns and minimizing the risks taken to earn this return (Alam et al., 2011). There is a generally accepted relationship between risk and return, that is, the higher the risk the higher the expected return. Therefore, traditional measures of bank performance have measured both risks and returns. The increasing competition in the national and international banking markets, the changeover towards monetary unions and the new technological innovations herald major changes in banking environment, and challenge all banks to make timely preparations in order to enter into new competitive financial environment. Aburime (2009) investigated the effectiveness of Nigerian banks based on their political affiliation. The study found that political factors were a major determinant of performance of Nigerian banks.

Profit after tax has been widely used as measures of banks' performance. Regarding factors affecting bank performance, different factors have been used by researchers such as: shareholders' equity; liquid assets to assets; total loans to total deposits; fixed assets to total assets; total borrowed funds to total assets; reserves for loans to total assets; market concentration; the market size; labor productivity; bank portfolio composition; capital productivity, bank capitalization; financial interrelation ratio; the level of capitalization; age of the bank; per capita Gross Domestic Product (GDP), the cost to-income ratio and customer satisfaction (Athanasoglou et al., 2008). Financial performance of banks is usually expressed as a function of internal and external

determinants. The internal determinants originate from bank accounts and therefore could be termed micro or bank-specific determinants of performance.

The external determinants are variables that are not related to bank management but reflect the economic and legal environment that affects the operation and performance of financial institutions. A number of explanatory variables have been proposed for both categories, according to the nature and purpose of each study (Alam et al., 2011). Studies dealing with internal determinants employ variables such as size, capital, risk management and expenses management, human resource and bank innovativeness. External determinants of bank financial performance include factors such as inflation, interest rates and cyclical output, and variables that represent market characteristics (Alam et al., 2011). The latter refer to market concentration, industry size and ownership status of the banks.

1.1.3 Mobile Banking and Financial Performance

The innovative National Industrial Corporation (NIC) mobile banking platform promises a number of 'firsts' within the banking industry and Information Technology fields. Through a partnership with the leading mobile service provider in the country Safaricom and Cellulant, Banks in Kenya have further taken its one life, one bank promise to your mobile phone bringing crucial financial services at your fingertips (Wahome, 2009).

Wahome (2009) additionally cites that in setting the pace of innovation within the banking industry, NIC Bank became the first bank to work directly with the Safaricom global pioneer money transfer service, M-PESA to enable customers to debit their existing bank account and credit their M-PESA account directly. This

greatly impacted on the convenience of these financial transactions to customers. Kenya's banking history goes back to 1896 when the national Bank of India opened a branch in the East African country. The banking system in Kenya consists of 49 commercial Banks, four building societies, two mortgage finance companies and three non-banking financial institutions. Seventy three percent of all banking business is handled by 12 % of the Kenyan banks. This comprises of twelve major banks (East African discusses road ahead for Kenyan banks, 2005).

Stiff competitions exist among banks in Kenya. Some open seven days a week in an effort to attract more clients. They are aggressively pursuing growth in personal loan products. However Kenyan banking industry still has a way to go. Salaries and wages processing costs are often very high because there are no Information Technology (IT) systems as each branch has its own infrastructure this means that any work which could be done at a central place, then distributed to the branches through networking has to be done at the branch level, this increases cost of staff needed and also reduces efficiency. New legislations, a new IT infrastructure and new strategic directions will strongly contribute towards growth of banking in Kenya. Most banks have achieved branchless banking through Automated Teller Machine. (East Africa Discusses Road Ahead for Kenyan Banks, 2005).

1.1.4 Commercial Banks in Kenya

Commercial banks are the foundation of the payment system in many economies by playing an intermediary role between savers and borrowers. They further enhance the financial system by ensuring that financial institutions are stable and are able to effectively facilitate financial transactions. The main challenges to commercial banks

in their operations are the disbursement of loans and advances. There is need for commercial banks to adopt appropriate credit appraisal techniques to minimize the possibility of loan defaults since defaults on loan repayments leads to adverse effects such as the depositors losing their money, loss of confidence in the banking system, and financial instability (Central Bank of Kenya, 1997).

In Kenya, commercial banks play an important role in mobilizing financial resources for investment by extending credit to various businesses and investors. Lending represents the heart of the banking industry and loans are the dominant assets as they generate the largest share of operating income. Loans however expose the banks to the greatest level of risk. There are 44 licensed commercial banks in Kenya, one mortgage finance company and one credit reference bureau. Of the 45 financial institutions, 32 are locally owned and 13 are foreign owned. The Credit Reference Bureau Africa was the first of its kind to be registered in Kenya by the Central bank of Kenya aimed at enabling commercial banks to share information about borrowers to facilitate effectiveness in credit scoring.

Financial performance of the 43 commercial banks that were in operations in 2008 averaged Ksh1027.628 billion, while of the 42 banks in 2007 averaged Ksh818.19 billion as the First Community Bank started its operations in 2008. The operations of the 40 commercial banks that were in operation in 2006, 2005 and 2004 resulted to average profits of Ksh644.3 billion, Ksh465.75 billion and Ksh351.15 billion respectively. Net profits as a proportion of total assets for the banks averaged0.0225 in 2008, 0.02434 in 2007, 0.02444 in 2006, 0.0182 in 2005 and 0.0132 in 2004. Thus on average the profits of the banking industry increased during the period 2004 to 2008. NotablyGulf Africa Bank started its operations in 2007 while Family Bank

converted to a commercial bank in 2007. The average figures for each year take into account the number of institutions that were in operation in each of the years.

1.2 Research Problem

Most of the Banks world over has adopted Mobile Banking applications allowing customers with busy lives to conveniently do their banking using their mobile devices anytime. Customers no longer need to visit the bank to check their balances and perform transactions; they can make transfers and pay their bills anytime anywhere at their convenience. This is one of such innovations which have changed the shape of banking in Kenya aimed at providing customers with more convenient banking experience.

Kenya mobile banking arena is fast developing and shaping the landscape of cashless transactions exponentially. Mobile phones have become a key tool for economic and social survival with a proven capacity to act as development catalysts. Kenyan banks are laying great emphasis on technology, product innovation and customer service .This digital drive has become part of most banks strategy and corporate goal.

All these models are geared towards leveraging the operating costs of commercial banks. In essence when costs are minimized there is a likelihood of positive impact into the Banks financial performance. Most banks often are too cautious of high staff costs and if such can be minimized due to Mobile banking take on the better.

However a gap remains in addressing the overall implications of mobile phone banking, in relation to traditional banking transactions. This is evidenced by studies that reveal unresolved issues on mobile phone banking and little or no examination on how the technology is affecting banking transactions. However , Graham, (2011) and

Luarna, (2005) argue that the extent to which this is realistically possible remains questionable owing to the studies that reveal unaddressed concerns between mobile phone and financial performance of commercial banks. According to Daniel (1999), most of the research in M-banking has focused on provision of banking services using a device or channel to distribute the service through internet banking (Black, et al., 2002).

Locally here in Kenya, the studies done before have focused on e-commerce, specifically looking at the challenges faced by banks customers or the kinds of benefits the banks and customers accrue from these services (Mbuvi, 2007). Merwe's (2001) study looked specifically at the security risks exposed to users of mobile banking as well as the technical aspects, while Ndege (2006) researched on how customers in Kenya adopted to the use of mobile banking. Research is still lacking on challenges faced by users of mobile banking services through mobile phones which is still unexplored territory. Merwe concentrates on the technical and security aspects of M-banking while Ndege discusses customer adoption of M-banking service in Kenya.

Despite the findings of all these previous research Mobile Banking adoption continues in Kenya. More and more banks are strategically launching newer and newer Mobile Banking platforms. At the same time improved financial performance in comparison to previous periods has been the trend by these commercial banks yet there are limited studies focusing on the effect of Mobile Banking on financial performance of commercial banks in Kenya. This study therefore sought to fill this knowledge gap by establishing the effect of Mobile Banking on financial performance of Commercial Banks in Kenya.

1.3 Objective of the Study

To determine the effect of mobile banking on financial performance of commercial banks in Kenya.

1.4 Value of Study

The study will not only be useful to the banks in Kenya but will also provide an understanding of the effects of mobile banking to the M-banking services providers. This will be useful to the service providers (Safaricom, Airtel and Orange) who will use it to solve existing bottlenecks to encourage M-banking in Kenya. This will enable them to tailor make their products in line with customers' needs and make targeted marketing decisions for M-banking.

The study will also be of value to academia as a basis of future empirical and conceptual research, which will be helpful in refining and validating findings especially when a significant number of experiences is collected and studied.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter considers literature relevant to the subject under study. It summarizes the information from other researchers who have carried out their research in the same field of study. The specific areas covered here are theoretical review, empirical review and the conceptual framework.

2.2 Theoretical Review

This section reviews theories that will guide the study. It consists of the theories governing the performance of commercial banks in their operations. In particular, the section looks at the Innovation Diffusion Theory which deals with how new inventions in this case internet and Mobile banking is adopted and becomes successful, Financial intermediation Theory which deals with the core function of financial institutions in intermediating between the surplus and the deficit units for sustained economic development. It also reviews the Modern Economics Theory which holds that for a business to make returns, it has to obey the modern economics.

2.2.1 Innovation Diffusion Theory

Mahajan and Peterson (1985) defined an innovation as any idea, object or practice that is perceived as new by members of the social system and defined the diffusion of innovation as the process by which the innovation is communicated through certain channels over time among members of social systems. Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case internet and mobile banking is adopted and becomes successful Clarke (1995).

Sevcik(2004) stated that not all innovations are adopted even if they are good it may take a long time for an innovation to be adopted. He further stated that resistance to change may be a hindrance to diffusion of innovation although it might not stop the innovation it will slow it down.

Rogers (1995) identified five critical attributes that greatly influence the rate of adoption. These include relative advantage, compatibility, complexity, triability and observability. According to Rogers, the rate of adoption of new innovations will depend on how an organization perceives its relative advantage, compatibility, triability, observability and complexity. If an organization in Kenya observes the benefits of mobile and internet banking they will adopt these innovations given other factors such as the availability of the required tools. Adoption of such innovations will be faster in organizations that have internet access and information technology departments than in organizations without

2.2.2 Financial Intermediation Theory

Financial intermediation is a process which involves surplus units depositing funds with financial institutions who then lend to deficit units. According to Scholtens and van Wensveen (2003), the role of the financial intermediary is essentially seen as that of creating specialized financial commodities. These are created whenever an intermediary finds that it can sell them for prices which are expected to cover all costs of their production, both direct costs and opportunity costs. Financial intermediaries exist due to market imperfections. As such, in a 'perfect' market situation, with no transaction or information costs, financial intermediaries would not exist.

Numerous markets are characterized by informational differences between buyers and sellers. In financial markets, information asymmetries are particularly pronounced.

Borrowers typically know their collateral, industriousness, and moral integrity better than do lenders. On the other hand, entrepreneurs possess inside information about their own projects for which they seek financing (Leland and Pyle, 1977). Moral hazard hampers the transfer of information between market participants, which is an important factor for projects of good quality to be financed.

2.2.3 Modern Economics Theory

Modern economics has gone far in discovering the various pathways through which millions of expectations of, and decisions by, individuals can give rise to emergent features of communities and societies like rate of inflation, productivity gains, and level of national income, prices, and stocks of various types of capital, cultural values, and social norms. Two factors make economic theory particularly difficult (Sohail and Shanmugham, 2003). First, individual decisions at any moment are themselves influenced by these emergent features, by past decisions learning, practice, and habit, and by future expectations. Second, the emergent features that can be well handled by existing economic theory and policy concern only fast-moving variables. The more slowly emergent properties that affect attitudes, culture, and institutional arrangements are recognized, but are poorly incorporated.

According to Tiwari, Buse and Herstatt (2006), economists know that success in achieving financial return from fast dynamics leads to slowly emergent, nearly hidden, changes in deeper and slower structures, changes that can ultimately trigger sudden crisis and surprise. But the complexities that arise are such that most modern economists are frustrated in their attempts to understand the interactions between fast- and slow-moving emergent features.

2.3 Determinants of Financial Performance

The determinants of bank performances can be classified into bank specific (internal) and macroeconomic (external) factors (Al-Tamimi, 2010; Aburime, 2005). These are stochastic variables that determine the output. Internal factors are individual bank characteristics which affect the banks performance. These factors are basically influenced by internal decisions of management and the board. The external factors are sector-wide or country-wide factors which are beyond the control of the company and affect the financial performance of banks. The overall financial performance of banks in Kenya in the last two decade has been improving. However, this doesn't mean that all banks are profitable, there are banks declaring losses (Oloo, 2010). Studies have shown that bank specific and macroeconomic factors affect the performance of commercial banks (Flamini et al., 2009). In this regard, the study of Olweny and Shipho (2011) in Kenya focused on sector-specific factors that affect the performance of commercial banks. Yet, the latest element; Mobile Banking on the performance of commercial banks in Kenya was not studied. Thus this study will be conducted with the intention of filling this gap.

2.3.1 Capital Adequacy

Capital is one of the bank specific factors that influence the level of banks financial performance. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al., 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000). However, it is not without drawbacks that it induce weak demand for liability, the cheapest sources of fund Capital adequacy is the level of

capital required by the banks to enable them withstand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the financial performance of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

2.3.2 Asset Quality

The bank's asset is another bank specific variable that affects the financial performance of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income. The quality of loan portfolio determines the financial performance of banks. The loan portfolio quality has a direct bearing on bank financial performance. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the financial performance of the bank. Low nonperforming loans to total loans signify a good health of the bank portfolio. The lower the ratio the better the bank is performing (Sangmi and Nazir, 2010).

2.3.3 Management Efficiency

Management Efficiency is also another key internal factor that determines the bank financial performance. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Yet, it is one of the complexes subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff and others.

The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. One of this ratios used to measure management quality is operating profit to income ratio (Rahman et al., in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is that proxy management quality is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with financial performance. Management quality in this regard, determines the level of operating expenses and in turn affects financial performance (Athanasoglou et al., 2005).

2.3.4 Liquidity Management

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related to bank

financial performance. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

2.4 Empirical Review

This section reviews the international and local information currently available concerning this topic in order to demonstrate through understanding of the topic and to what extent the same has been studied by others.

2.4.1 International evidence

Agboola (2006) in his study on Information and Communication Technology (ICT) in Banking operations in Nigeria using the nature and degree of adoption of innovative technologies; degree of utilization of the identified technologies; and the impact of the adoption of ICT devices on banks, found out that technology was the main driving force of competition in the banking industry. During his study he witnessed increase in the adoption of ATMs, EFT, smart cards, electronic home and office banking and telephone banking. He indicates that adoption of ICT improves the banks' image and leads to a wider, faster and more efficient market. He asserts that it is imperative for bank management to intensify investment in ICT products to facilitate speed, convenience, and accurate services, or otherwise lose out to their competitors.

Tiwari, Buse and Herstatt (2006) studied mobile banking as business strategy, impact of mobile technologies on customer behavior and its implications for banks. The

study sought to examine the opportunities for banks to generate revenues by offering value added; innovative mobile financial services while retaining and even extending their base of technology to understanding customers.

Shirley and Sushanta (2006) studied the impact of information technology on the banking industry and analyzed both theoretically and empirically how information technology related spending can affect bank profits via competition in financial services that are offered by the banks. Using a panel of 68 US banks for a period of over 20 years to estimate the impact of IT on profitability of banks, they found out that though IT might lead to cost saving, higher IT spending can create network effects lowering bank profits.

Donner and Tellez (2008) did a study on mobile banking and economic development where they sought to link adoption, impact, and use. The study established that through offering a way to lower the costs of moving money from place to place and offering a way to bring more users into contact with formal financial systems, m-banking/m-payments systems could prove to be an important innovation for the developing world. However, the true measure of that importance required multiple studies using multiple methodologies and multiple theoretical perspectives before answering the questions about adoption and impact.

Malhotra and Singh (2009) in their study on the impact of internet banking on bank performance and risk found out that on average internet banks are larger, more profitable and are more operationally efficient. They also found that internet banks have higher asset quality and are better managed to lower the expenses for building and equipment and that internet banks in India rely substantially on deposits. They

further found out that smaller banks that adopt internet banking have been negatively impacted on profitability.

Ching*et al.*,(2011) studied the factors affecting Malaysian mobile banking adoption from the point of an empirical analysis. This study aimed at extending the Technology Acceptance Model (TAM) to investigate mobile banking acceptance in Malaysia. More specifically, the objective of this study was to examine the relationships between constructs of perceived usefulness, perceived ease of use, social norms, perceived risks, perceived innovativeness, and perceived relative advantages towards behavioral intention in adopting mobile banking. The findings of this study revealed that perceived usefulness, perceived ease of use, relative advantages, perceived risks and personal innovativeness were the factors affecting the behavioral intention of mobile users to adopt mobile banking services in Malaysia. Meanwhile, the social norms were the only factor found to be insignificant in this study.

Tchouassi (2012) sought to find out whether mobile phones really work to extend banking services to the unbanked using empirical Lessons from Selected Sub-Saharan Africa Countries. This study sought to discuss how mobile phones could be used to extend banking services to the unbanked, poor and vulnerable population. The study noted that poor, vulnerable and low-income households in Sub-Saharan Africa (SSA) countries often lacked access to bank accounts and faced high costs of conducting basic financial transactions. The mobile phone presented a great opportunity for the provision of financial services to the unbanked. In addition to technological and economic innovation, policy and regulatory innovation was needed to make these services a reality.

2.4.2 Local evidence

Wambari (2009) studied mobile banking in developing countries using a case of Kenya. This study sought to establish the importance of mobile banking in the day to-day running of small businesses in Kenya and to understand the challenges involved in using m-banking as a business tool and appreciate the advantages and disadvantages there in. The study elaborated that the adoption and use of mobile phones is a product of a social process, embedded in social practices such as SMEs practices which leads to some economic benefits.

Munaye (2009) studied the application of mobile banking as a strategic response by equity bank Kenya limited to the challenge in the external environment. He also reviewed the concept of mobile banking as a strategic response where its effects on financial performance were not considered.

Zimmerman (2010) discovered that mobile banking in developing world was an object of skepticism among financial insiders while proponents argued that cell phones could revolutionize personal finance in poorer country, regulators warned of money laundering and most bankers worried that low customer balances wouldn't be worth transaction costs. From the above discussion of empirical literature, this study hypothesizes that mobile banking supports the delivery of mobile banking services in an economy.

Kigen (2010) studied the impact of mobile banking on transaction costs of microfinance institutions where he found out that by then, mobile banking had reduced transaction costs considerably though they were not directly felt by the banks

because of the then small mobile banking customer base. He sought to determine the impact that mobile banking bore on transactional costs of microfinance institutions.

Kingoo (2011) studied the relationship between electronic banking and financial performance of commercial banks in Kenya where he paid keen attention on the microfinance Institutions in Nairobi. He actually looked at the wider electronic banking.

Al-Jabri (2012) studied mobile banking adoption by looking at the application of diffusion of innovation theory. This study sought to investigate a set of technical attributes and how they influence mobile banking adoption in a developing nation. According to Koivu (2012) uptake of mobile phone in Kenya has been unprecedented. Mobile banking in Kenya affects performance of organization, behavior and decision making of the entire economy. The trend of continued reliance on mobile devices to execute monetary transaction is steadily gaining momentum. Mobile banking is one innovation which has progressively rendered itself in pervasive ways of cutting across numerous sectors of economy and industry.

2.5 Summary of the Literature Review

Among the issues reviewed include the effects of mobile banking which include market expansion/partnership, efficiency in service delivery, access to information and customer satisfaction.From the above discussion of the theoretical and empirical literature, most of the studies have looked into the wider electronic banking as opposed to specifically mobile banking whereas the ones on mobile banking have limited research conducted on the effect of mobile banking on financial performance

of commercial banks in Kenya. Also most of the existing studies have been done in other economies which have different operating environment from that in Kenya. This study therefore sought to fill this research gap.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It involves a blueprint for the collection, measurement and analysis of data. In this stage, most decisions about how research was executed and how respondents were approached, as well as when, where and how the research was completed. Therefore in this section the research identified the procedures and techniques that were used in the collection, processing and analysis of data. Specifically the following subsections were included; research design, target population, sampling design, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

Research design is the blue print on how one goes about answering the objectives of the study (Bryman and Bell, 2007). It refers to the way in which the study was designed and the method that were used in carrying out the research. Both qualitative and quantitative approaches were used. A quantitative approach is linked to deductive method of testing theories while qualitative approach is characterized with inductive testing (Saunders, et al., 2003). The study focused more on the qualitative approach but in some instances, quantitative approach was employed in order to get better understanding and more insightful interpretation of the results.

Cross sectional descriptive survey was employed in this case. This informed who, how and what about the mobile banking in commercial banks in Kenya and as a one-time event. Furthermore, descriptive research enables the study to generalize the results of the findings to a bigger population. Descriptive research design is used to

obtain information concerning the current state to describe what exists in respect to variables or conditions in a situation. It is also useful in identifying variables and hypothetical constructs and it may be used to test theories. The approach involves gathering data that describes events and then organizes, tabulates, depicts and describes data. It uses description as a tool to organize data in patterns that emerge during analysis.

3.3 Target Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. And by population the researcher means complete census of the sampling frames. Population studies also called census are more representative because everyone has equal chance to be included in the final sample that is drawn according to Mugenda&Mugenda (2004). The population of this study comprised of all licensed commercial banks in Kenya.

These commercial banks in Kenya are licensed and regulated pursuant to the provisions of the Banking Act and the Regulations and Prudential Guidelines issued there under. According to CBK (2013), currently there are 43 licensed commercial banks in Kenya.The study thus adopted a census method where all the commercial banks practicing mobile banking in Kenya were studied.

3.4 Data Collection

The study made use of secondary data from the Audited Financial statements of the Banks, those deposited at the Nairobi Securities Exchange and financial performance data from CBK annual banking survey reports. It also included the Banks publications, journals and periodicals. The data was collected using data collection sheet.

3.5 Data Analysis

The data collected was cleaned, coded and systematically organized in a manner that facilitates analysis using the Statistical Package for Social Sciences (SPSS). Quantitative analysis was analyzed through descriptive statistics such as measure of central tendency that generated relevant percentages, frequency counts, mode, and median and mean where possible.

3.5.1 Analytical Model

The following regression model was used to establish the relationship between use of Mobile banking platforms and Financial Performance of Commercial Banks in Kenya.

The study used Return on Assets (ROA) and Return on Equity (ROE) as a measure of financial performance while the overall operating cost as well as other Bank specific factors in form of ratios as independent variables.

$Y= \beta_0+\beta_1X_1+ \beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+ e.$

Where Y = Financial performance of Commercial Banks as measured by ROA and ROE.

X_1= Annual amount of money moved through mobile banking (captured deposits and transfers during the period in review)

X_2= Number of users of Mobile Banking during the period.

X_3=Capital adequacy measured as Equity Capital to Total Assets.

X_4=Asset Quality measured as loan loss provisions to Total loans.

X_5=Bank Liquidity measured as Total loans to Total Assets.

X_6=Management efficiency measured as Operating costs to total income.

e. = Error term

β_0= Constant

β_i=Coefficient of Variable ***i*** which measures the rate of change of Y as a function of change in ***i***.

The indicator ROA (Return on Assets) and ROE (Return on Equity) are used as the basic indicators of profitability in evaluating commercial banks' financial performance:

ROE = Profit after tax /Own capital

ROA = Profit after tax /Total assets

We can calculate the return on own capital also with the aid of ROA:

ROE = ROA (Total assets /Own capital)

This relationship of both indicators is important. ROE and ROA are interconnected via total assets, which express the extent of financing. This means that small changes in the ROA indicator lead to large changes in the ROE indicator. The ROE indicator is an important indicator of how efficiently bank capital is used

3.5.2 Test of Significance

To test for the strength of the model and the effects of mobile banking on the financial performance of commercial banks in Kenya, the study conducted an Analysis of Variance (ANOVA). On extracting the ANOVA statistics, the researcher looked at the significance value. The study was tested at 95% confidence level and 5% significance level. If the value of the test statistic lied in the acceptance zone, the test was found to be true or otherwise.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the analysis and results of the findings. It presents analysis of the data to determine the effect of mobile banking on financial performance of commercial banks in Kenya. The chapter also provides the major findings and results of the study.

4.2 Descriptive Statistics

The study sought to establish the developments in the number of mobile banking users among commercial banks and the amount of money transacted through Mobile Banking. Also it captured other bank specific factors (some in form of ratios) influencing the financial performance of commercial banks. The findings were as shown in the Table 4.1 below.

Table 4. 1: Summary of the study variables for the study period

	2009	2010	2011	2012	2013	Mean	Standard Deviation
Annual amount of money moved through Mobile Banking	3,841,686,442	3,221,580,791	3,979,756,349	4,829,642,698	6,472,049,977	4468943251	1258094659
Number of users of Mobile Banking	9995	12262	14723	20352	22716	16009.6343	5378.22168
Capital Adequacy	1280566149	1073865021	994943270.8	1609888354	2157358235	1423324206	474242540.1
Asset Quality	726081006.4	608881466.9	564132834.5	912806696.7	1223222119	807024825	268895520.3
Bank Liquidity	35.22	38.42	41.01	44.71	56.48	43.168	8.2152
Management Efficiency	11.43	25.937	36.451	40.43	42.301	27.654	11.401

Source: Research Findings

According to the findings in Table 4.1 the annual amount of money moved through mobile banking has been on an increasing trend since the year 2009, 2013 had the highest figure at 6,472,049,977, the number of users of mobile banking too have been on an upward trend since 2009 with a 22716 users in 2013, the same trend is maintained by bank liquidity and management efficiency where the highest value was recorded in 2013 with 56.48 and 42.301 respectively. On the other hand capital adequacy and asset quality posted mixed results during the period of study with the peak of capital adequacy being 2013 at 2157358235 same as that of asset quality which was at 1223222119.

4.3 Regression Analysis

In this study, a multiple regression analysis was conducted to test the relationship among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions.

Table 4. 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.872	0.766	0.751	0.573

Source: Research Findings

R-Squared is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted $R^{2,}$ also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 75.1% of the financial performance of the commercial banks in Kenya could be attributed to the combined effect of the predictor variables.

Table 4.3: **Summary of One-Way ANOVA.**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.215	6	2.241	6.35	0.01
	Residual	26.497	7	0.673		
	Total	34.712	13			

Source: Research Findings

The probability value of 0.014 indicates that the regression relationship was highly significant in predicting how mobile banking affect financial performance of commercial banks in Kenya. The F calculated at 5% level of significance was 6.352 since F calculated is greater than the F critical (value = 3.87), this shows that the overall model was significant.

Table 4. 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.076	0.215		2.89	5.32E-04
	Annual amount of Money moved through Mobile Banking	0.671	0.151	0.615	5.31	1.51E-05
	Number of users of Mobile Banking	0.738	0.183	0.151	3.21	2.10E-04
	Capital Adequacy	0.562	0.198	0.236	4.26	6.18E-05
	Asset Quality	0.426	0.224	0.172	3.21	3.96E-05
	Bank Liquidity	0.647	0.248	0.239	2.68	1.54E-04
	Management Efficiency	0.783	0.093	0.14	3.99	1.76E-04

Source: Research Findings

As per the SPSS generated table above, the equation ($Y= \beta_0+\beta_1X_1+ \beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+ e$) becomes:

$Y= 1.076 + 0.671\ X_1+ 0.738\ X_2+ 0.562\ X_3+ 0.426\ X_4+ 0.647\ X_5+ 0.783\ X_6$

The regression equation above has established that taking all factors into account (annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency) constant at zero financial performance of commercial banks in Kenya will be 1.076. The findings presented also show that taking all other independent variables at zero, a unit increase in the annual amount of money moved through mobile banking would lead to a 0.671 increase in the scores of financial performance of commercial banks in Kenya, a unit increase in the scores of number of users of mobile banking would lead to a 0.738 increase in the scores of financial performance of commercial banks in Kenya, a unit increases in the scores of capital adequacy would lead to a 0.562 increase in the scores of financial performance of commercial banks in Kenya and a unit increase in the scores of asset quality would lead to a 0.426 increase in the scores of financial performance of commercial banks in Kenya. The study also found that a unit increase in the scores of bank liquidity would lead to a 0.647 increase in the scores of financial performance of commercial banks in Kenya while a unit increase in the scores of management efficiency would lead to a 0.783 increase in the scores of financial performance of commercial banks in Kenya.

Overall, management efficiency had the greatest effect on financial performance of commercial banks in Kenya, followed by number of users using mobile banking, then annual amount of money moved through mobile banking, then bank liquidity, then

capital adequacy while asset quality had the least effect on financial performance of commercial banks in Kenya. All the variables were significant ($p<0.05$).

4.4Interpretation of the Findings

From the above regression model, the study found out that there were mobile banking variables influencing the financial performance of commercial banks in Kenya, which are annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency. They influenced it positively. The study found out that the intercept was 1.076 for all years.

The six independent variables that were studied (annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency) explain a substantial 75.1% of financial performance of commercial banks in Kenya as represented by adjusted R^2 (0.751). This therefore means that the six independent variables contributes 75.1% of the financial performance of commercial banks in Kenya while other factors and random variations not studied in this research contributes a measly 24.9% of the financial performance of commercial banks in Kenya.

The study established that the coefficient for annual amount of money moved through mobile banking was 0.671, meaning that annual amount of money moved through mobile banking positively and significantly influenced the financial performance of commercial banks in Kenya. The study established that the coefficient for number of users of mobile banking was 0.738, meaning that number of users of mobile banking positively and significantly influenced the financial performance of commercial banks

in Kenya. This correlates with Wahome (2009) who advances that stiff competitions exist among banks in Kenya. Some open seven days a week in an effort to attract more clients. They are aggressively pursuing growth in personal loan products.

The study further revealed that the coefficient for capital adequacy was 0.562, meaning that capital adequacy positively and significantly influenced the financial performance of commercial banks in Kenya. This concurs with (Athanasoglou et al., 2005) capital is one of the bank specific factors that influence the level of banks financial performance. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation. Diamond (2000) argues that banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress

The study also deduced that the coefficient for asset quality was 0.426, meaning that asset quality positively but significantly influenced the financial performance of commercial banks in Kenya. Dang (2011) states that the bank's asset is another bank specific variable that affects the financial performance of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income. The quality of loan portfolio determines the financial performance of banks. The loan portfolio quality has a direct bearing on bank financial performance.

Further, the study established that the coefficient for bank liquidity was 0.647, meaning that bank liquidity positively but significantly influenced the financial

performance of commercial banks in Kenya. These findings correlate with Dang (2011) who states that adequate level of liquidity is positively related to bank financial performance. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks.

Finally the study established that the coefficient for management efficiency was 0.783, this means that management efficiency positively and significantly influenced the financial performance of commercial banks in Kenya. These findings are in line with (Athanasoglou et al., 2005) who argues that management quality determines the level of operating expenses and in turn affects financial performance. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. One of this ratios used to measure management quality is operating profit to income ratio. The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion and recommendations of the main findings on the relationship between mobile banking and financial performance of commercial banks in Kenya.

5.2 Summary

Mobile banking is a service provided by financial institutions in cooperation with mobile phone operators. It allows customers with busy lives to conveniently do their banking using their phones anytime. It is about getting banking services to the unbanked, those who do not have bank access or bank accounts, and those who are at the bottom of the economic pyramid, often living in remote areas. The innovative National Industrial Corporation (NIC) mobile banking platform promises a number of 'firsts' within the banking industry and Information Technology fields. The study sought to determine the effect of mobile banking on financial performance of commercial banks in Kenya. Cross sectional descriptive survey was employed in this case. This informed who, how and what about the mobile banking in commercial banks in Kenya and as a one-time event. The study adopted a census method where all the 14 commercial banks practicing mobile banking in Kenya were studied. The study made use of secondary data from the Audited Financial statements of the Banks, those deposited at the Nairobi Securities Exchange and financial performance data from CBK annual banking survey reports. The data collected was cleaned, coded and systematically organized in a manner that facilitates analysis using the Statistical

Package for Social Sciences (SPSS). Quantitative analysis was analyzed through descriptive statistics such as measure of central tendency that generated relevant percentages, frequency counts, mode, and median and mean where possible. To test for the strength of the model and the effects of mobile banking on the financial performance of commercial banks in Kenya, the study conducted an Analysis of Variance (ANOVA). From the regression model, the study found out that there were mobile banking variables influencing the financial performance of commercial banks in Kenya, which are annual amount of money moved through mobile banking and number of users of mobile banking. Other variables such as capital adequacy, asset quality, bank liquidity and management efficiency not necessarily mobile banking related were also included. They influenced it positively. The study found out that the intercept was 1.076 for all years. The six independent variables that were studied (annual amount of money moved through mobile banking, number of users of mobile banking, capital adequacy, asset quality, bank liquidity and management efficiency) explain a substantial 75.1% of financial performance of commercial banks in Kenya as represented by adjusted R^2 (0.751). The study therefore concludes that mobile banking positively and significantly affects the financial performance of commercial banks in Kenya.

5.3 Conclusion

From the findings of the study; the study concludes that mobile banking has contributed positively to the financial performance of commercial banks in Kenya. This could be attributed to the trends recorded in the variables where the number of users and annual transfers had a positive and significant influence to financial performance of commercial banks in Kenya. This is in line with Wahome (2009) who

posits that stiff competitions exist among banks in Kenya. Some open seven days a week in an effort to attract more clients. They are aggressively pursuing growth in personal loan products. This therefore means that the more clients a bank has in the mobile banking platform and the higher the amount of money transacted through mobile banking the better the financial performance of a commercial bank.

5.4 Recommendations for Policy

From the above conclusion, the study recommends that policy makers consider mobile banking in their formulation of policies because of the technological developments and the expected switch from physical branch networks to technologically supported banking services. This is because despite negligible relationship between mobile banking and financial performance of commercial banks in Kenya, the impact could be pronounced if much change is recorded in technological developments and more customers adopt mobile banking services. This is because the relationship may not be direct but an indirect one resulting from the convenience that the mobile banking services offers to commercial banks.

Mobile banking is being used to improve financial operations in commercial banks. The banks have put in place measures to become more competitive by training its staff, investing in research and development of technology. In the long run, mobile banking is likely to have major impacts on the profitability of commercial banks as it smoothens business operations.

The study further recommends that commercial banks keep adopting and using mobile banking in their operations because the number of people with access to a mobile hand set is increasing every day. In addition, the convergence of mobile

phones and commercial banks has revolutionized the banking operations. For example, Safaricom limited in conjunction with Commercial Bank of Africa launched M-Shwari services which provide registered members an opportunity to borrow money from the bank and repay conveniently. This has introduced another perspective that is likely to revolutionize the banking operations for increased profitability.

5.5 Limitations of the Study

Mobile banking is a relatively new technology and not very many studies have been done especially on its effect on the financial performance of commercial banks. The few studies that have been done have tended to concentrate on its adoption. Furthermore, the banking industry is a very competitive environment and as such, the bank managementhas not disclosed much information for fear of competition.

On the same note, due to the insecurity risks involved in the banks, management in some instances were suspicious of any inquisitive personality especially on issues which are believed to be used by the competitors in extracting sensitive information. The extent of the study was limited by time to collect more data from the respective banks, which may have led to improved conclusions.

5.6 Recommendation for Further Research

The study suggests that further research be conducted on the relationship between mobile banking and financial performance in other countries within the East African Community. This study only concentrated on Kenya yet mobile banking has been adopted in all members of the East African Community.

The study further recommends that another study be conducted in Kenya on the relationship between mobile banking and economic growth to establish the contributions of mobile banking on the growth of the economy.

Further, the study recommends that a similar study should be conducted among the mobile service provider companies to find out whether it will yield the same results.

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APPENDICES

Appendix I: Number of Customers Registered: Mobile Banking in Kenya from 2009-2013

No of Customers Registered. Mobile Banking	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	11031	12349	13601	52120	65794
Equity Bank Limited	30250	45320	49320	53461	57508
Co-op Bank	71128	96152	114124	123692	138863
Barclays Bank	30681	35253	42063	46120	52012
Standard Chartered Bank Ltd	6419	10941	12126	15618	17572
CFC Stanbic Bank	63470	70693	97540	123086	149499
Commercial Bank of Africa	3457	4230	4650	5940	6650
Diamond Trust Bank Kenya	592	628	8260	1290	4055
I & M Bank	4523	8275	10843	101162	132980
Citibank, N.A.	9356	10811	10112	15243	16487
NIC Bank Ltd	6241	7293	7342	8461	8867
National Bank(NBK)	2250	3398	301	3562	2584
Bank of Africa	9362	11905	15398	17531	20571
Bank of Baroda (K) Ltd	2956	3012	3201	3561	3807
Chase Bank Limited	7001	7351	9834	10157	11920
Prime Bank Limited	2935	3064	3203	3561	3773
Housing finance	9870	10967	15693	20130	24760
Ecobank Kenya Ltd	5238	6532	8651	9821	11624
Family Bank	9721	11031	13202	14201	15981
Imperial Bank Limited	14238	15051	15234	16137	16560
Bank of India	1075	1153	1259	1615	1804
Consolidated Bank of Kenya	4728	5912	6521	6931	7474
Fina Bank Limited	3676	4132	4539	4793	5149
Equitorial Commercial Bank	1171	1269	1436	1527	1669
Gulf African Bank	3108	3254	3516	4216	4624
African Banking Corporation	6312	7236	7538	7936	8270
Giro Commercial Bank	11695	12318	13209	14281	15232
Development Bank of Kenya	5079	5716	6183	6293	6641

Fidelity Commercial Bank	1154	1523	1817	3256	3932
K-Rep Bank Ltd	1723	1965	2712	2864	3413
Guardian Bank	3452	3856	4321	4523	4900
First community Bank	964	1191	2014	2135	2724
Habib AG Zurich	1234	1530	1538	2145	2353
Victoria Comm. Bank Ltd	1738	1861	1986	2937	3337
Transnational Bank Limited	9995	12262	14723	20352	23869
Habib Bank Limited	3406	6360	8097	12711	15407
Credit Bank Ltd	4163	7441	9422	14631	17688
Oriental Comm. Bank	4920	8522	10747	16551	19969
Paramount-Universal Bank	5677	9604	12073	18471	22250
Middle East Bank of Kenya	6434	10685	13398	20391	24531
UBA BANK	7192	11766	14723	22311	26812
Dubai Bank Limited	7949	12848	16049	24231	29093
Jamii Bora Bank	8706	13929	17374	26152	31374

Source: CBK, 2013

Appendix II: Annual Amount of Money moved through Mobile Banking.

Annual amount moved through mobile banking	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	3,653,681,000	3,982,191,000	4,457,989,000	4,457,989,000	18,815,320,000
Equity Bank Limited	9,288,169,000	10,920,250,000	16,360,520,000	16,360,520,000	19,299,421,000
Co-op Bank	23,180,893,000	25,677,208,000	34,710,872,000	34,710,872,000	44,652,812,000
Barclays Bank	9,574,081,000	11,075,841,000	12,726,333,000	12,726,333,000	16,649,320,000
Standard Chartered Bank Ltd	1,514,756,000	2,317,259,000	3,949,701,000	3,949,701,000	5,638,098,000
CFC Stanbic Bank	20,883,489,000	22,912,670,000	25,520,173,000	25,520,173,000	44,434,046,000
Commercial Bank of Africa	564,604,000	1,247,977,000	1,527,030,000	1,527,030,000	2,144,340,000
Diamond Trust Bank Kenya	201,077,000	213,712,000	226,708,000	226,708,000	465,690,000
I & M Bank	1,306,820,000	1,632,803,000	2,987,275,000	2,987,275,000	36,519,482,000
Citibank, N.A.	2,649,740,000	3,377,516,000	3,902,771,000	3,902,771,000	5,502,723,000
NIC Bank Ltd	1,869,619,000	2,253,001,000	2,632,773,000	2,632,773,000	3,054,421,000
National Bank(NBK)	769,652,000	812,250,000	1,226,678,000	1,226,678,000	1,285,882,000
Bank of Africa	2,584,399,000	3,379,682,000	4,297,705,000	4,297,705,000	6,328,691,000
Bank of Baroda (K) Ltd	1,021,991,000	1,067,116,000	1,087,332,000	1,087,332,000	1,285,521,000
Chase Bank Limited	2,455,522,000	2,527,361,000	2,653,711,000	2,653,711,000	3,666,677,000
Prime Bank Limited	971,451,000	1,059,535,000	1,106,104,000	1,106,104,000	1,285,521,000
Housing finance	2,618,694,000	3,563,070,000	3,959,087,000	3,959,087,000	7,266,930,000
Ecobank Kenya Ltd	1,705,003,000	1,890,918,000	2,358,052,000	2,358,052,000	3,545,381,000
Family Bank	2,972,835,000	3,509,281,000	3,982,191,000	3,982,191,000	5,126,561,000

Imperial Bank Limited	5,026,925,000	5,139,918,000	5,433,411,000	5,433,411,000	5,825,457,000
Bank of India	358,473,000	388,075,000	416,233,000	416,233,000	583,015,000
Consolidated Bank of Kenya	1,708,252,000	1,706,808,000	2,134,232,000	2,134,232,000	2,502,091,000
Fina Bank Limited	1,175,416,000	1,327,036,000	1,491,652,000	1,491,652,000	1,730,273,000
Equitorial Commercial Bank	357,029,000	422,731,000	458,109,000	458,109,000	551,247,000
Gulf African Bank	906,832,000	1,121,988,000	1,174,694,000	1,174,694,000	1,521,976,000
African Banking Corporation	2,205,349,000	2,278,632,000	2,612,196,000	2,612,196,000	2,864,896,000
Giro Commercial Bank	3,705,665,000	4,221,895,000	4,446,798,000	4,446,798,000	5,155,441,000
Development Bank of Kenya	1,791,282,000	1,833,519,000	2,063,476,000	2,063,476,000	2,271,773,000
Fidelity Commercial Bank	338,618,000	416,594,000	549,803,000	549,803,000	1,175,416,000
K-Rep Bank Ltd	553,052,000	622,003,000	709,365,000	709,365,000	1,033,904,000
Guardian Bank	1,106,465,000	1,246,172,000	1,392,016,000	1,392,016,000	1,632,803,000
First community Bank	344,394,000	348,004,000	429,951,000	429,951,000	770,735,000
Habib AG Zurich	407,208,000	445,474,000	552,330,000	552,330,000	774,345,000
Victoria Comm. Bank Ltd	551,247,000	627,418,000	671,821,000	671,821,000	1,060,257,000
Transnational Bank Limited	3,491,592,000	1,711,501,000	2,885,112,000	2,885,112,000	17,577,090,000
Habib Bank Limited	7,845,252,000	1,861,316,000	4,684,336,000	4,684,336,000	381,216,000
Credit Bank Ltd	14,895,582,000	671,821,000	325,622,000	325,622,000	145,122,000
Oriental Comm. Bank	7,621,432,000	1,469,631,000	1,439,307,000	1,439,307,000	343,672,000
Paramount-Universal Bank	1,429,921,000	755,934,000	1,068,560,000	1,068,560,000	1,368,190,000
Middle East Bank of Kenya	18,396,560,000	1,943,263,000	266,418,000	266,418,000	46,208,000
UBA BANK	457,748,000	887,338,000	766,042,000	766,042,000	437,532,000
Dubai Bank Limited	188,081,000	2,357,330,000	1,923,769,000	1,923,769,000	906,832,000
Jamii Bora Bank	543,666,000	1,303,932,000	3,561,265,000	3,561,265,000	671,821,000
Dubai Bank Limited	7949	12848	16049	24231	29093
Jamii Bora Bank	8706	13929	17374	26152	31374

Source: CBK, 2013

Appendix III: Total Assets

TOTAL ASSETS	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	**164,875,372**	**172,690,915**	**282,494**	**304,112**	3.23E+08
Equity Bank Limited	**168,223,215**	**223,024,556**	**176,911**	**215,829**	2.38E+08
Co-op Bank	**123,909,119**	**142,880,029**	**167,772**	**199,663**	2.29E+08
Barclays Bank	**100,811,750**	**133,889,997**	**167,305**	**195,493**	2.21E+08
Standard Chartered Bank Ltd	**110,531,373**	**153,983,533**	**164,182**	**185,102**	2.07E+08
CFC Stanbic Bank	**47,146,767**	**62,069,592**	**140,087**	**133,378**	1.71E+08
Commercial Bank of Africa	**51,404,408**	**63,591,642**	**83,283**	**101,772**	1.25E+08
Diamond Trust Bank Kenya	**44,655,313**	**58,605,823**	**77,453**	**100,456**	1.14E+08
I & M Bank	**18,280,761**	**60,026,694**	**76,903**	**94,512**	1.13E+08

Citibank, N.A.	**5,130,103**	**54,776,432**	**74,646**	**91,520**	1.10E+08
NIC Bank Ltd	**97,337,054**	**62,552,113**	**73,581**	**69,580**	92493033
National Bank(NBK)	**23,697,056**	**107,138,602**	**68,665**	**67,155**	76568930
Bank of Africa	**57,628,290**	**29,325,841**	**38,734**	**49,105**	71242659
Bank of Baroda (K) Ltd	**3,664,948**	**6,215,384**	**36,701**	**48,958**	52683299
Chase Bank Limited	**6,898,919**	**32,444,424**	**36,513**	**46,138**	52021524
Prime Bank Limited	**15,358,108**	**4,530,094**	**35,185**	**43,463**	49460889
Housing finance	**6,777,889**	**10,478,682**	**31,972**	**40,686**	43500989
Ecobank Kenya Ltd	**3,364,459**	**19,399,089**	**27,210**	**34,590**	43006228
Family Bank	**4,491,372**	**8,031,214**	**26,002**	**31,771**	36907137
Imperial Bank Limited	**44,009,222**	**4,761,853**	**25,618**	**30,985**	30721440
Bank of India	**21,939,617**	**32,331,505**	**23,352**	**24,877**	25638049
Consolidated Bank of Kenya	**18,331,250**	**14,112,365**	**15,318**	**19,071**	19639370
Fina Bank Limited	**5,498,595**	**8,208,537**	**14,630**	**18,001**	16778631
Equitorial Commercial Bank	**490,890**	**1,723,233**	**12,927**	**17,150**	16053971
Gulf African Bank	**6,914,485**	**10,233,964**	**12,915**	**14,109**	15580630
African Banking Corporation	**16,919,962**	**26,699,124**	**12,507**	**13,562**	15562475
Giro Commercial Bank	**13,305,770**	**20,188,379**	**11,846**	**13,417**	13644242
Development Bank of Kenya	**8,109,411**	**10,649,758**	**11,523**	**12,280**	13623296
Fidelity Commercial Bank	**12,969,712**	**21,858,603**	**10,789**	**11,772**	13199240
K-Rep Bank Ltd	**3,100,351**	**4,419,806**	**9,319**	**11,745**	12834687
Guardian Bank	**15,394,571**	**19,671,456**	**8,754**	**10,323**	12778509
First community Bank	**51,371,890**	**10,398,805**	**8,740**	**9,959**	11305398
Habib AG Zurich	**4,461,421**	**10,348,739**	**8,722**	**9,702**	11009480
Victoria Comm. Bank Ltd	**8,971,669**	**4,558,349**	**7,645**	**9,548**	9657868
Transnational Bank Limited	**3,052,314**	**26,892,185**	**7,287**	**8,801**	8078122
Habib Bank Limited	**13,949,400**	**8,127,135**	**5,861**	**7,255**	8028877
Credit Bank Ltd	**7,339,320**	**4,018,428**	**5,394**	**7,014**	7308854
Oriental Comm. Bank	**3,141,381**	**7,670,050**	**5,030**	**6,407**	7010323
Paramount-Universal Bank	**7,136,327**	**5,425,541**	**4,727**	**6,220**	7006527
Middle East Bank of Kenya	**4,658,793**	**1,874,268**	**4,639**	**5,870**	5765799
UBA BANK	**1,596,398**	**9,594,061**	**3,206**	**3,480**	3709630
Dubai Bank Limited	**7,748,940**	**6,380,098**	**2,316**	**2,924**	2926860
Jamii Bora Bank	**4,451,626**		**2,070**	**2,584**	2.66E+09

Source: CBK, 2013

Appendix IV: Total Loans.

Total Loans	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	93,542,609	87,146,982	179,844	187,023	233,701
Equity Bank Limited	98,749,618	137,344,568	106,486	122,410	169,088
Co-op Bank	56,694,876	60,336,829	109,409	119,088	165,766
Barclays Bank	63,378,232	72,902,021	96,098	112,695	159,373
Standard Chartered Bank Ltd	62,274,421	86,618,311	99,072	104,204	150,882
CFC Stanbic Bank	30,634,025	21,322,597	64,257	66,150	112,828
Commercial Bank of Africa	13,156,455	32,608,876	52,025	66,381	113,059
Diamond Trust Bank Kenya	31,133,485	37,850,277	39,610	42,504	89,182
I & M Bank	14,495,208	20,844,636	50,944	59,930	106,608
Citibank, N.A.	436,729	38,340,879	46,779	55,375	102,053
NIC Bank Ltd	44,977,967	35,658,053	28,451	23,331	70,009
National Bank(NBK)	10,615,380	58,984,960	28,068	28,347	75,025
Bank of Africa	30,087,373	19,503,400	18,139	29,284	75,962
Bank of Baroda (K) Ltd	1,880,943	3,484,944	21,640	29,882	76,560
Chase Bank Limited	3,868,472	14,836,692	19,144	21,923	68,601
Prime Bank Limited	9,676,110	1,926,918	18,394	21,151	67,829
Housing finance	4,121,977	6,047,276	25,223	30,294	76,972
Ecobank Kenya Ltd	1,688,664	11,262,362	14,904	19,038	65,716
Family Bank	1,953,296	4,732,471	11,381	13,968	60,646
Imperial Bank Limited	24,591,500	1,991,178	16,332	17,869	64,547
Bank of India	9,084,430	13,434,459	7,229	10,015	56,693
Consolidated Bank of Kenya	9,291,539	6,718,235	7,074	9,790	56,468
Fina Bank Limited	3,293,085	4,472,541	9,197	10,077	56,755
Equitorial Commercial Bank	183,868	327,331	7,277	8,743	55,421
Gulf African Bank	3,682,333	4,933,235	6,635	7,538	54,216
African Banking Corporation	9,120,438	14,122,485	7,440	9,447	56,125
Giro Commercial Bank	7,675,806	10,208,137	5,902	6,932	53,610
Development Bank of Kenya	4,768,579	5,392,436	6,360	5,519	52,197
Fidelity Commercial Bank	6,745,468	11,131,009	6,546	6,639	53,317
K-Rep Bank Ltd	1,355,655	1,735,099	5,865	7,153	53,831

Guardian Bank	5,439,539	5,923,970	4,110	5,291	51,969
First community Bank	21,401,747	4,851,414	4,258	5,453	52,131
Habib AG Zurich	2,749,529	5,288,180	2,667	2,328	49,006
Victoria Comm. Bank Ltd	3,992,127	2,450,600	6,754	6,955	53,633
Transnational Bank Limited	1,518,545	9,693,276	3,382	4,360	51,038
Habib Bank Limited	6,444,336	2,249,351	2,067	2,740	49,418
Credit Bank Ltd	2,175,272	2,213,290	2,177	3,341	50,019
Oriental Comm. Bank	1,619,369	5,252,438	2,883	3,112	49,790
Paramount-Universal Bank	4,816,960	1,595,752	2,851	3,499	50,177
Middle East Bank of Kenya	1,253,920	1,086,032	2,564	3,145	49,823
UBA BANK	1,144,162	6,270,684	302	1,309	47,987
Dubai Bank Limited	4,950,218	2,983,550	506	440	47,118
Jamii Bora Bank	2,290,296		1,517	1,783	48,461

Source: CBK, 2013

Appendix V: Total Loss Provisions

Total loss provisions	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	4651.885	3120.185	4279.734	2705.2	3218.36
Equity Bank Limited	3827.664	1455.875	3521.451	1262.244	2648.131
Co-op Bank	1086.41	999.882	999.4972	866.8977	751.6219
Barclays Bank	4930.012	881.763	4535.611	764.4885	3410.78
Standard Chartered Bank Ltd	423.503	144.376	389.6228	125.174	292.9963
CFC Stanbic Bank	592.583	739.844	545.1764	641.4447	409.9726
Commercial Bank of Africa	1587.162	265.264	1460.189	229.9839	1098.062
Diamond Trust Bank Kenya	549.462	106.602	505.505	92.42393	380.1398
I & M Bank	475.211	920.819	437.1941	798.3501	328.77
Citibank, N.A.	1476.7	14.168	1358.564	12.28366	1021.64
NIC Bank Ltd	138.621	0	127.5313	0	95.90355
National Bank(NBK)	854.456	725.626	786.0995	629.1177	591.1468
Bank of Africa	386.187	143.797	355.292	124.672	267.1796
Bank of Baroda (K) Ltd	39.303	86.301	36.15876	74.82297	27.19139
Chase Bank Limited	529.597	8.278	487.2292	7.177026	366.3964
Prime Bank Limited	445.435	127.901	409.8002	110.8902	308.1698
Housing finance	214.61	197.766	197.4412	171.4631	148.4758
Ecobank Kenya Ltd	916.524	136.518	843.2021	118.3611	634.088
Family Bank	504.113	176.715	463.784	153.2119	348.7655
Imperial Bank Limited	646.181	645.272	594.4865	559.4508	447.0539
Bank of India	361.174	18.899	332.2801	16.38543	249.8746

Consolidated Bank of Kenya	55.055	24.219	50.6506	20.99787	38.08925
Fina Bank Limited	287.333	167.599	264.3464	145.3083	198.7885
Equitorial Commercial Bank	104.675	65.547	96.301	56.82925	72.41835
Gulf African Bank	134.794	169.343	124.0105	146.8204	93.25588
African Banking Corporation	348.695	64.492	320.7994	55.91456	241.2411
Giro Commercial Bank	247.685	23.993	227.8702	20.80193	171.3584
Development Bank of Kenya	-26.522	-8.227	-24.4002	-7.13281	-18.349
Fidelity Commercial Bank	114.37	94.766	105.2204	82.16212	79.12574
K-Rep Bank Ltd	266.015	26.579	244.7338	23.04399	184.0398
Guardian Bank	311.075	0	286.189	0	215.2141
First community Bank	37.105	55.922	34.1366	48.48437	25.67072
Habib AG Zurich	0	34.701	0	30.08577	0
Victoria Comm. Bank Ltd	229.515	291.826	211.1538	253.0131	158.7877
Transnational Bank Limited	160.315	50.663	147.4898	43.92482	110.9123
Habib Bank Limited	334.909	5.565	308.1163	4.824855	231.7034
Credit Bank Ltd	70.798	28.394	65.13416	24.6176	48.98089
Oriental Comm. Bank	36.197	5.56	33.30124	4.82052	25.04253
Paramount-Universal Bank	33.869	34.84	31.15948	30.20628	23.43193
Middle East Bank of Kenya	145.015	15.391	133.4138	13.344	100.3272
UBA BANK	241.688	30.865	222.353	26.75996	167.2094
Dubai Bank Limited	4.675	36.097	4.301	31.2961	3.234352
Jamii Bora Bank	66.45	177.601	61.134	153.9801	45.97277

Source: CBK, 2013

Appendix VI: Liquidity

Liquidity	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	27%	29%	31%	36%	45%
Equity Bank Limited	31%	34%	37%	46%	58%
Co-op Bank	23%	25%	27%	36%	45%
Barclays Bank	36%	39%	43%	39%	49%
Standard Chartered Bank Ltd	29%	31%	34%	47%	59%
CFC Stanbic Bank	32%	35%	38%	46%	58%
Commercial Bank of Africa	38%	41%	45%	35%	45%
Diamond Trust Bank Kenya	30%	33%	36%	48%	60%
I & M Bank	33%	35%	38%	38%	48%
Citibank, N.A.	54%	58%	63%	35%	45%

NIC Bank Ltd	23%	25%	27%	82%	103%
National Bank(NBK)	29%	31%	34%	30%	38%
Bank of Africa	22%	24%	26%	43%	55%
Bank of Baroda (K) Ltd	42%	45%	49%	26%	32%
Chase Bank Limited	40%	43%	47%	56%	70%
Prime Bank Limited	36%	39%	42%	48%	60%
Housing finance	25%	27%	29%	37%	46%
Ecobank Kenya Ltd	35%	38%	41%	39%	50%
Family Bank	24%	26%	28%	40%	50%
Imperial Bank Limited	29%	31%	34%	39%	49%
Bank of India	67%	72%	79%	66%	83%
Consolidated Bank of Kenya	23%	25%	28%	43%	54%
Fina Bank Limited	41%	44%	48%	47%	60%
Equitorial Commercial Bank	28%	30%	32%	44%	55%
Gulf African Bank	32%	35%	38%	32%	41%
African Banking Corporation	29%	32%	35%	29%	37%
Giro Commercial Bank	36%	39%	42%	46%	58%
Development Bank of Kenya	31%	33%	36%	55%	69%
Fidelity Commercial Bank	26%	28%	31%	34%	43%
K-Rep Bank Ltd	25%	27%	29%	39%	49%
Guardian Bank	26%	28%	30%	38%	48%
First community Bank	41%	44%	48%	40%	50%
Habib AG Zurich	62%	68%	73%	86%	85%
Victoria Comm. Bank Ltd	31%	33%	36%	31%	39%
Transnational Bank Limited	57%	62%	67%	60%	76%
Habib Bank Limited	66%	72%	78%	66%	83%
Credit Bank Ltd	35%	38%	41%	63%	79%
Oriental Comm. Bank	37%	40%	44%	49%	62%
Paramount-Universal Bank	49%	53%	58%	45%	57%
Middle East Bank of Kenya	27%	30%	32%	41%	52%
UBA BANK	63%	76%	83%	62%	78%
Dubai Bank Limited	29%	31%	34%	13%	42%
Jamii Bora Bank	24%	14%	46%	24%	

Source: CBK, 2013

Appendix VII:ROA

ROA	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	0.0357	0.0517	0.0498	0.052	0.0591
Equity Bank Limited	0.0566	0.0695	0.0684	0.074	0.0799
Co-op Bank	0.053	0.0624	0.0718	0.07	0.0794
Barclays Bank	0.0326	0.0361	0.0368	0.048	0.0501
Standard Chartered Bank Ltd	0.0539	0.0537	0.0503	0.059	0.0572
CFC Stanbic Bank	0.0135	0.0196	0.0223	0.035	0.0394
Commercial Bank of Africa	0.0592	0.0464	0.0643	0.104	0.1066
Diamond Trust Bank Kenya	0.0344	0.049	0.0419	0.049	0.0528
I & M Bank	0.033	0.0441	0.0457	0.042	0.0484
Citibank, N.A.	0.0413	0.0449	0.0356	0.017	0.0142
NIC Bank Ltd	0.0324	0.0565	0.0457	0.036	0.0427
National Bank(NBK)	0.0233	0.0237	0.0307	0.027	0.0307
Bank of Africa	0.0242	0.0245	0.0233	0.027	0.0266
Bank of Baroda (K) Ltd	0.0509	0.0643	0.0637	0.055	0.0614
Chase Bank Limited	0.0391	0.0504	0.0418	0.024	0.0254
Prime Bank Limited	0.0018	0.0107	0.0212	0.02	0.0297
Housing finance	0.0154	0.0246	0.0161	0.01	0.0104
Ecobank Kenya Ltd	0.0282	0.0467	0.0412	0.029	0.0355
Family Bank	-0.021	0.0049	0.012	0.028	0.0445
Imperial Bank Limited	0.0263	0.062	0.0279	0.017	0.0178
Bank of India	0.0169	-0.0032	0.0055	-0.046	-0.0517
Consolidated Bank of Kenya	0.0094	0.0459	0.0279	0.009	0.0183
Fina Bank Limited	-0.0376	0.0144	0.0275	0.032	0.0646
Equitorial Commercial Bank	0.0227	0.0222	0.0137	0.008	0.0035
Gulf African Bank	0.0236	0.0333	0.0405	0.037	0.0455
African Banking Corporation	0.0385	0.0305	0.0291	0.042	0.0373

Giro Commercial Bank	0.0083	0.0139	0.0192	0.019	0.0245
Development Bank of Kenya	0.0422	0.05	0.0431	0.048	0.0485
Fidelity Commercial Bank	0.0416	0.0434	0.0462	0.065	0.0673
K-Rep Bank Ltd	0.0097	0.0401	0.0383	0.018	0.0323
Guardian Bank	0.0215	0.0074	0.0095	0.013	0.007
First community Bank	0.0123	0.0635	0.0239	0.012	0.0178
Habib AG Zurich	0.0137	0.0511	0.0199	0.008	0.0111
Victoria Comm. Bank Ltd	0.0041	0.0018	0.009	-0.012	-0.0096
Transnational Bank Limited	0.0076	0.025	0.0163	0.0056	0.01
Habib Bank Limited	0.0066	0.0243	0.0153	0.0041	0.0085
Credit Bank Ltd	0.0056	0.0236	0.0143	0.0026	0.007
Oriental Comm. Bank	0.0046	0.0229	0.0132	0.0012	0.0055
Paramount-Universal Bank	0.0036	0.0222	0.0122	-0.0003	0.004
Middle East Bank of Kenya	0.0025	0.0215	0.0112	-0.0018	0.0025
UBA BANK	0.0015	0.0208	0.0102	-0.0033	0.001
Dubai Bank Limited	0.0005	0.0202	0.0091	-0.0048	-0.0005

Source: CBK, 2013

Appendix VIII: Equity Capital

Equity capital	**2009**	**2010**	**2011**	**2012**	**2013**
Kenya Commercial (KCB)	20058	22398	4 0,876	45163	52926
Equity Bank Limited	19660	23337	2 8,308	35047	42672
Co-op Bank	20463	24210	3 1,465	29223	29583
Barclays Bank	13933	16103	2 0,202	20972	28967
Standard Chartered Bank Ltd	11390	13807	2 0,210	20571	30603
CFC Stanbic Bank	7118	8143	1 0,035	10150	18101
Commercial Bank of Africa	9190	11077	1 2,882	15112	17346
Diamond Trust Bank Kenya	5334	6263	8 ,057	10366	14878
I & M Bank	5529	6434	7 ,896	9900	15065
Citibank, N.A.	6208	7908	9 ,930	10456	10450
NIC Bank Ltd	1910	2565	4 ,744	4936	5758
National Bank(NBK)	3075	3065	3 ,898	3742	4175
Bank of Africa	845	1223	1 ,715	2969	5101
Bank of Baroda (K) Ltd	1912	2247	3 ,095	3685	4554

Chase Bank Limited	1690	2069	2 ,756	3378	4063
Prime Bank Limited	1171	1198	1 ,336	1536	2504
Housing finance	846	927	1 ,477	1435	1574
Ecobank Kenya Ltd	968	1145	1 ,631	1702	2112
Family Bank	1273	1150	1 ,224	1319	1561
Imperial Bank Limited	608	857	1 ,340	1579	1775
Bank of India	676	730	9 06	1204	722
Consolidated Bank of Kenya	424	490	8 01	1017	1185
Fina Bank Limited	1129	1107	1 ,158	1331	1527
Equitorial Commercial Bank	1229	1363	1 ,489	1562	1634
Gulf African Bank	1235	1325	1 ,541	1743	1834
African Banking Corporation	774	958	1 ,118	1280	1530
Giro Commercial Bank	835	873	948	1065	1219
Development Bank of Kenya	763	935	1 ,103	1579	2036
Fidelity Commercial Bank	620	747	896	1062	1348
K-Rep Bank Ltd	944	982	1 ,138	1290	1385
Guardian Bank	666	728	948	958	1179
First community Bank	492	527	785	1026	1136
Habib AG Zurich	877	904	1 ,027	1100	1124
Victoria Comm. Bank Ltd	411	463	596	712	917
Transnational Bank Limited	537	559	948	815	890
Habib Bank Limited	501	512	2 ,103	752	801
Credit Bank Ltd	464	465	896	688	711
Oriental Comm. Bank	428	418	2 ,138	625	622
Paramount-Universal Bank	391	371	622	562	532
Middle East Bank of Kenya	355	324	459	499	443
UBA BANK	319	278	2 ,027	436	353
Dubai Bank Limited	282	231	596	373	264

Source: CBK, 2013

Appendix IX: Total Income/Profit/(Loss) before tax and exceptional items.

total income/Profit/(loss) before tax and exceptional items	2009	2010	2011	2012	2013
Kenya Commercial (KCB)	10,775,354	9,002,466	8015781	7,078,800	5,699,014
Equity Bank Limited	11,537,533	6,425,558	4988203	2,363,818	-910,847
Co-op Bank	7,667,532	6,725,951	4719814	4,910,188	3,436,329
Barclays Bank	9,311,818	5,219,821	6012862	4,225,982	2,576,504
Standard Chartered Bank Ltd	5,559,028	3,726,854	1484174	1,049,907	-987,520
CFC Stanbic Bank	2,878,535	1,634,288	1626811	925,154	299,292
Commercial Bank of Africa	2,694,921	2,159,441	464875	277,362	-837,661
Diamond Trust Bank Kenya	2,871,811	1,528,892	202670	130,723	-1,203,848
I & M Bank	2,697,823	353,875	170070	151,021	-1,112,856
Citibank, N.A.	2,416,342	216,419	1312604	1,194,155	642,286
NIC Bank Ltd	3,004,483	1,332,929	460360	316,719	-955,343
National Bank(NBK)	2,103,983	563,617	3358819	2,318,524	2,945,942
Bank of Africa	560,234	1,767,707	1765398	1,416,489	2,019,071
Bank of Baroda (K) Ltd	310,932	82,559	79197	130,955	15,088
Chase Bank Limited	769,630	116,568	84928	25,821	-316,530
Prime Bank Limited	33,612	801,810	673427	563,958	883,866
Housing finance	257,748	61,073	1796565	1,610,084	2,379,493
Ecobank Kenya Ltd	1,247,861	87,576	43877	25,001	-576,991
Family Bank	111,638	-729,550	121169	80,677	85,443
Imperial Bank Limited	158,583	1,752,225	5528	41,173	-35,355
Bank of India	1,827,573	726,293	1591551	1,294,163	1,176,152
Consolidated Bank of Kenya	151,312	173,941	632834	523,079	763,840
Fina Bank Limited	376,587	52,007	155912	115,390	5,053
Equitorial Commercial Bank	-83,565	-6,524	72581	48,769	126,842

Gulf African Bank	634,334	185,083	-3011	-28,496	-347,169
African Banking Corporation	484,477	260,436	125608	41,037	-138,398
Giro Commercial Bank	500,662	342,608	271420	157,811	43,190
Development Bank of Kenya	236,005	189,275	530733	267,701	415,065
Fidelity Commercial Bank	535,082	318,136	169199	157,377	-25,565
K-Rep Bank Ltd	280,873	42,087	247394	179,507	162,768
Guardian Bank	990,543	608,891	51156	43,149	-426,545
First community Bank	-33,596	3,055,255	608883	473,566	794,805
Habib AG Zurich	476,689	74,260	3352868	1,782,030	3,220,120
Victoria Comm. Bank Ltd	182,930	243,525	-7918	72,970	-22,454
Transnational Bank Limited	187,920	33,059	224213	184,855	203,002
Habib Bank Limited	210,870	726,051	1,045,574	650,027	1,067,379
Credit Bank Ltd	178,198	765,959	1,135,434	707,887	1,186,505
Oriental Comm. Bank	145,526	805,867	1,225,294	765,748	1,305,632
Paramount-Universal Bank	112,854	845,776	1,315,155	823,608	1,424,758
Middle East Bank of Kenya	80,182	885,684	1,405,015	881,468	1,543,885
UBA BANK	47,510	925,592	1,494,875	939,329	1,663,011
Dubai Bank Limited	14,838	965,500	1,584,735	997,189	1,782,138

Source: CBK, 2013