THE EFFECT OF CREDIT CARD USAGE ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university for academic credit.

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This project has been submitted for examination with my approval as appointed supervisor.

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DEDICATION

This research project is dedicated to my beloved husband Daniel Kyalo Kitavi who offered unconditional sacrifice, support and prayers during the course of the entire MBA programme. Special dedication to my two sons; Excellent Munene and Baraka Manesa, who have always remained my source of inspiration and desire to excel academically.

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ABSTRACT

The study investigated the effect of the credit card usage on the performance of commercial banks, that is; whether the credit card usage will increase or decrease the profitability of commercial banks. The study adopted a casual research design. Secondary data for seven commercial banks for the period between 2009 and 2013 was used. The data was drawn from the published annual reports of commercial banks and the Central Bank of Kenya.

Descriptive statistics such as means score, frequencies and percentages for each variable were calculated. The analysis involved multiple regressions of variables under study that is the financial performance represented by return on assets, number of credit cards offered during the period of study, the number of transactions done by the customers using the credit cards, the amount of money customers have transacted using the credit cards, leverage ratio of banks and the age of banks.

Using OLS regression method, inferential tests including the Pearson Product − Moment Correlation Coefficient and regression analysis was conducted. The result established coefficient of determination of 0.612 (R=0.612) between credit card usage and financial performance of the commercial banks. The study recommends that commercial banks should revise the interest rate charged on the credit cards. This has the end effect of encouraging consumers to increase the usage of credit cards.

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ACRONYMS AND ABBREVIATION

ANOVA: Analysis of Variance

CRB: Credit Reference Bureaus

CBK: Central Bank of Kenya

CRD: Credit Cards

CRDT: Credit Card Transactions

DPS: Dividend per Share

EPS: Earnings per Share

FP: Financial Performance

ICT: Information and Communication Technology

MFC: Mortgage Finance Company

MFB: Microfinance Banks

MP: Market Power

ROE: Rate of Return on Equity

ROA: Rate of Return on Assets

OLS: Ordinary Least Squares

SPSS: Statistical packages for social sciences

SCP: Structure- Conduct- Performance

TVOL: Transaction Volumes

LV: Leverage

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Credit cards have become a fact of life for the most consumers and are a part of the consumer culture. Staggering credit card statistics provide evidence of their pervasiveness. As of 2011, seventy-seven percent of the US adults owned at least one credit card, with a total of 1.4 billion cards in circulation. The average cardholder owned 7.7 cards and uses a credit card 119 times a year charging an average of $88 per transaction or $10,500 annually (my FICO,2012). By the end of 2011,with the unfolding of America's economic crisis, the average household credit card debt reached $16,420(Federal Reserve G.19 March,2012).

The credit card has evolved over the last thirty years in to one of the most accepted, convenient and profitable financial products. It is accepted by millions of consumers and merchants worldwide as a routine means of payment for all varieties of products and services. The rapid growth of the credit card industry evidences the cards value to the financial community, including consumers, merchants and issuing banks. (credit card lending comptroller's handbook October 1996, procedures March 1998.)

Credit cards have been used as a means of facilitating delayed payments purchased since early in the century. The first credit card systems were operated by retailers and service organizations in connection with the merchandising of their products. While such programs were used in local markets by departmental stores, oil companies were the first issuers to recognize the potential of credit card plans in the larger

geographical areas. The efforts of the new, independent issuers were concentrated upon the solicitation of accounts, the evaluation of cardholder credit standing and the development of centralized accounting and the processing systems. Since these services are closely related to services provided by the traditional financial institutions, it is not surprising that banks undertook to create their own credit card systems (Weistart 1972).

Commercial bank charge cards are being used by more American consumers in their purchasing behavior than ever before. The number of the users of the bank credit card is steadily on the increase and has become an area of consumer behavior that has received recent attention in the marketing literature. Recently, the concept of consumer credit has been expanded as the consumer has become more sophisticated shopper; credit has played an increasing role in facilitating the acquisition of goods and services. Similarly, a greater number of retail and financial institutions are realizing that providing credit service is a means or reaching new market segments.(Mathews and John 1969).

1.1.1 The Credit Card Usage

Naim (1995) states that credit card is a contract whereby the card issuer be committed to credit a certain amount of money for someone who is the cardholder in order to meet her or his personal purchases from shops that are associated with the issuer of the card with a contract to accept the fulfillment of cardholder's purchases and that is the final settlement after each specified period. According to (Al- Zubaidi, 2002) credit card was defined as a card that gives the holder the right to deal with many shops that are consistent with the issuer of the card to accept the granting of the credit

for the cardholder to pay off her or his purchases, who will repay the value of purchases to the bank through 25 days from the date of the purchase. The customer pays no interest to the bank for this service if the payment was done during the period but if he or she bears an interest of 1.5% on the remaining balance without a payment, the seller earns a commission of between 3-5% from the seller of the total value of the invoice.

Despite signs of growth, the economy is still emerging from the worst recession in the recent memory, a phenomenon that hit the credit card issuers hard. With consumers spending less regulatory pressures constraining fees and interest rates. Credit card issuers have experience a material impact on income coupled with increases in delinquencies and charge-offs, card issuers have had to weather nearly unprecedented turbulence. A common challenge faced by the global credit card industry is compacting attrition and diminishing wallet share, particularly as consumers exhibit an increasing preference for debit over credit card. To cope with this, the credit card issuers are implementing aggressive anti-attrition, pro- retention strategies (Phil,2011).

From the 2013 Federal reserve payments study, the report highlights that over the years, payments have become increasingly card- based. Card use may have replaced check use for certain payments, but the increase in the number of card payments has far exceeded the decline in the number of check payments from 2009 to 2012. Credit card payments declined slightly from 2006 to 2009 and returned to growth from 2009 to 2012. The number of credit card transactions grew at an annual rate of 7-6 percent, rising from 21 billion in 2009 to 26.2 billion in 2012.

Wilfred Michoma, the KCB Group head of credit cards said that the entry of Equity, I&M and Cooperative banks into the processing of payments business has helped increase the number of POS machines particularly in areas which did not originally have these machines. He said that over the last two years most POS terminals have turned to using mobile lines for communication as opposed to the land line technology used previously and as such the delays that used to experience when a line is down have been addressed. HabilOlaka, the chief executive officer of Kenya Bankers Association said the increase can be attributed to the acceptance of the use of plastic money as a mode of payment, rather than the long-time view of it as a status symbol. This has been helped greatly by the uptake of technology by the large retail supermarket chains and retailers (Business Daily posted November 21, 2012).

The use of the credit cards in the society has affected not only traditional consumers, but also vulnerable groups, such as college students, senior citizens, and disabled citizens. College students have grown up in the age of credit, becoming independent consumers earlier in life, and constantly exposed to new products and services available through credit cards. Along with technology and the expansion of the internet, they become an appealing demographic group for credit card companies and financial institutions for a variety of reasons. Solicitation on college campuses has caused concern among college officials, consumer advocacy groups and legislators (Robb& Sharpe, 2009).

For many international travelers and conference attendees, life would be far more difficult without the ability to pay by plastic card for goods and services consumed. Most airlines, railway networks, car hire firms, hotels and restaurants now accept

payment by plastic cards as do many retailers and other merchant outlets and by doing so they reduce the need for consumers to carry cash in the local currency or traveler's cheques. The major international card associations of Visa, Euro pay/ MasterCard, American Express, Diners club and JCB all seek to have their payment cards accepted in the widest possible range of merchant outlets. In need Visa and MasterCard, the largest two major card associations, each have over 12 million acceptance locations throughout the world, who take payment by the credit.(Steve,1995).

1.1.2 Financial Performance of Commercial Banks

Evaluating bank performance is a complex process that involves assessing interaction between the environment, internal operations and external activities. In general, a number of financial ratios are usually used to assess the performance of banks. Financial performance has been studied under different yardsticks of performance i.e size, profitability, financing patter, economic efficiency, operational efficiency, asset quality, diversification and cost of operations.

Like all the businesses, banks make profit by earning more money than what they pay in expenses. The major portion of bank profit comes from the fees that it charges for its services and the interest that it earns on its assets (Young and Rice 2004). Its major expense will be the interest paid on its liabilities (Rasia, 2010). The major assets of the bank are its loans to individuals, businesses and other organizations and the securities that it holds; while its major liabilities are its deposits and the money that it borrows either from other banks or by selling commercial paper in the money market.

The top financial institutions worldwide are developing profitability management systems that feature the creation of quantitative objectives, the careful monitoring of progress against these goals, tighter expense controls and more aggressive pricing and collection procedures (Baral, 2005).

The global financial crisis of 2007/ 2009 demonstrated the need of performance of banks in both local and international economies. As a result, the performance of banks should be monitored to ensure smooth running of the economy. More attention should be given to the developing countries because in these economies, the financial markets are underdeveloped hence more reliance on the banking sector to provide finance for the majority of the firms (Athanasoglou et al 2006)

The aim of financial management is to maximize the wealth of owners; the achievement of this goal depends on the ability of banks to make profit. Usually profitability is measured by calculating the relationship between the net profit after tax and net owners' equity represented by the capital paid and reserves. This rate is used by commercial banks divided by total owner's equity (AL- Zoubi, 1998).

Measuring the performance of an organization is a representation of quantification of results of various activities undertaken within that organization over a period of time. For performance measurement to be undertaken there is need to know the link between objectives, performance measurements and organization results and the relevance of the performance metrics. In most contemporary organizations, organizational performance is done or undertaken using three types of methods. The first method is through the use of a balanced score card which was introduced by two

Harvard University experts Kaplan and Norton in early 1990s. The main aim of the balanced score card is to give an organization the chance to translate its corporate strategy into action (Maria, Florica and Catalina, 2002). The other modern method of measuring performance of an organization involves the use of the Deming model which stresses on the identification of variations in the production process and fixing them. The last method is through the use of the BALDRIGE model which suggests that the standards used to measure the performance of an organization must be derived from business strategy and they must have the ability to relevant information (Maria, Florica and Catalina, 2002).

1.1.3 The Effect of Credit Card Usage on the Financial Performance of Commercial Banks

Issuing credit cards has turned into big business. These financial institutions that issue cards to consumers make money through outstanding balance fees, annual fees, and late payment fees. On the front end, when consumers make purchases with their cards, financial institutions make roughly 2.00% (the actual amount depends on the size of the sale).The fees that banks charge when credit cards are used for purchases are known as Interchange. The industry has come under fire during the past few years because interchange fees have risen 117% in the past five years. Interchange prices are fixed regardless of volume, which has irked many larger retailers. Credit cards are now an integral part of our lives with roughly 80% of all families having some type of credit card. (Douglas, 2005)

Past investigations on the credit card usage have acknowledged the role that the credit cards play on the financial performance of commercial banks. Odhiambo (2012) in his study on the effect of the credit cards on the performance of commercial banks portfolio in Kenya particularly in Migori town acknowledges the fact that the credit cards have a positive effect on the financial performance of the commercial banks in Kenya. Kamal in the study on the effect of the electronic credit card usage on bank's profitability agrees with Odhiambo (2012) that there is a positive effect between the number of the credit cards, the net income from the credit cards and the profitability o the commercial banks.

Theoretically credit card usage is expected to have a positive effect on the financial performance of the commercial banks, as the credit card results in more income from the interest charged to the customers and the interchange fees that the merchants pay to the banks. In addition, the late payment charges, the annual charges, charges for printing a statement, charges for issuing a new card and the renewal fees.

Muiru (2014) in his study the effects of financial innovation on financial performance of commercial banks found out that some banks in Kenya had adopted some forms of financial innovation like the credit cards, mobiles and agency banking and these had a great impact on the financial performance of commercial banks.

Credit card banks incur high non-interest expenses. On December 31, 2003, for instance, the average noninterest expense of credit card banks amounted to roughly 17 percent of the total assets. Processing credit card transactions is a costly operation. Pavel and Binkley (1987) detail the mechanics of bank card transactions. When a

cardholder uses his or her card, a sales slip is created and sent to a merchant's bank for processing. The merchant's bank credits the merchant account for the amount of the sale and sends the sale information to the interchange facilities (visa and MasterCard) who then transfer the sales information to the issuing bank and send the amount of transaction less an interchange fee and per item fee to the merchant's bank then the issuing bank bills the cardholder. Having to process a large volume of transactions and service a large number of transactions and service a large number of accounts, credit card banks incur large processing expenses. Although advances in technology have substantially improved operating efficiency at the credit card banks, operating expenses remain high.

According to CBK annual reports (2013), the value of transactions effected through cards in the year to June 2013 increased by 6.4 percent and 79.1 percent from Kshs 673.31 billion to Kshs716.44 billion for acquirers and issuers, respectively. Correspondingly, withdrawals increased by 95.7 percent and 41.7 percent from 148.8 million withdrawals to 291.22 million withdrawals and 219.98 million withdrawals to 311.83 million withdrawals for acquirers and issuers, respectively. According to the CBK annual report, the growing usage of card signifies a growing shift from cash based payments to non-cash based payments. For a period of 5 years, the number of credit cards in circulation has grown from 106,842 in 2009 to 133,137 cards in 2013. (CBK annual report 2013)

According to Bank Supervision Report (2013), the Kenyan banking sector registered improved performance in 2013 notwithstanding the marginal economic growth. The sector registered a 15.9 percent growth in total net assets from Kshs 2.33 trillion in

December 2012 to Kshs 2.70 trillion in December 2013. The report continues to state that gross loans increased by 18.7 percent form Kshs 1,330.40 billion in December 2012 to Kshs 1,578.80 billion in December 2013. The growth in loans is attributed to increased demand for credit by the various economic sectors.

According to Paul and Loretta (1995) , between May 1989 and November 1991, the prime rate dropped from 11.5 percent to 7.5 percent , and the interest rate on large denomination CD's fell from around 9 percent to 5 percent. During this period, bank credit –card rates barely moved, the largest issuers holding their rates fixed at 18- 20 percent. This recent stickiness of credit card rates repeated a similar story. During several episodes in the 1980's when other interest rates rose or fell, credit card rates changed a little. At the same time, credit cards consistently earned higher returns than most other bank products. Studies done by Lawrence M Ausubel (1991) concluded that during 1980's, bank credit card operations earned 3-5 times the rate of return earned in the banking industry at large.

The dynamics of today's credit card market make it necessary for the successful issuing bank to manage every aspect of the lending process. In the past, success may have just happened, but with today's strong competition from other issuers, including nonbanks, and rapidly changing technologies, every step in the lending function is crucial to maximizing profits. Competition, market saturation, and changing consumer demographics and attitudes have also forced the successful issuing bank to be innovative with the credit card products it offers and its customer selection and management methods. As mentioned, a variety of factors have caused the credit card business to become one of the most complex and competitive areas in the financial

services industry. The market environment and risks make it essential for issuing banks to have written operating policies tied to well-conceived business plans and risk management systems. (Credit card lending comptroller's handbook Oct 1996, procedure March 1998)

1.1.4 Commercial Banking in Kenya

Commercial banks are intermediaries who are the main providers of credit to the household and corporate sector and operate the payments mechanism. Commercial banks are typically joint stock companies and may be either publicly listed on the stock exchange or privately owned. Commercial banks play a vital role in the economic resource allocation of countries; they channel funds from depositors to investors continuously. They can do so if they generate necessary income to cover their operational cost in the due course.

The commercial banks in Kenya and non- banking financial institutions offer corporate and retail banking services but a small number, mainly comprising the larger commercial banks, offer other services including investment banking, (Dikken&Hoeksema, 2001). In Kenya, The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK), govern the banking industry. The banking sector was liberalized in 1995 and exchange controls lifted. The CBK is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system.

In Kenya the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya, there are 43 licensed commercial banks in Kenya. Three of the banks are public financial institutions with majority shareholding being the Government and state corporations, the rest are private financial institutions. Of the private banks, 27 are local commercial banks while 13 are foreign commercial banks. Commercial banks in Kenya play a major role in Kenya.

As at 31st December 2013, the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions (43 commercial banks and 1 mortgage finance company- MFC), 7 representative offices of foreign banks, 9 Microfinance Banks (MFBs), 2 credit reference bureaus (CRB) and 101 forex bureaus. Out of the 44 banking institutions, 30 locally owned banks comprise 3 with public shareholding and 27 privately owned while 14 are foreign owned. The 9 owned financial institutions comprise of 10 locally incorporated foreign banks and 4 branches of foreign incorporated banks (Bank of Supervision Report 2013)

1.2 Research Problem

Credit card usage is expected to increase the profitability of commercial banks, as the credit card is a very convenient mode of purchasing goods and very acceptable mode of payment in merchant outlets hence more profits to the banks through the interchange fees paid by the merchants, late payment charges to the customers, annual fees, card renewal fees and the interest charges to the customers.

Currently, the fortunes of the credit card industry have changed dramatically. Record levels of defaults have transformed the sector from one of the most profitable areas of lending to one of the least. Federal regulations related to credit card business practices and the cost of borrowing have limited issuers' ability to raise interest rates and fees. Credit card companies must now adhere to much more stringent requirements for transparency. To meet spiraling consumer and merchant demands, they must enhance their financial disclosures and introduce new payment products. As these developments were not enough, the industry must also determine how to compete effectively against non- traditional players in its bid to retain profitability. The question arises as to whether investment in credit card increases or reduces the financial performance of commercial banks.

The performance of credit cards portfolio is influenced by complex interaction between several factors like credit risk, credit limit utilization, customer satisfaction and revenue generation. Cohen (2005) stated that the force that affects the economy in the developed countries is the purchases done with credit cards when compared to individual saving which can also be true for developing countries. A number of studies like (Nash, 1993) found out that credit card lending specialization gives higher and more volatile returns than achieved by banks with conventional product mixes.

Since 1970's there has been growing evidence supporting the frequently heard conjecture that credit cards encourage spending. For example it is known that people who own more credit cards make larger purchases per department store visit (Hirschman1986), and that restaurant tips are larger when payment is by card

(Feinberg 1986). There is also evidence that credit card users are more likely to underestimate or forget the amount spent on recent purchases (Soman, 1999).

Studies done by Mathews and Slocum (1969) found a number of interesting and useful relationships between social class and income and the usage of bank credit cards. For instance, they found out that members of the lower social classes tend to use their cards for installment purposes; upper classes for convenience. Further their results indicated that all the users had a favorable general attitude toward credit; however, installment users tended to use their cards more frequently. Their study also indicated that the upper classes are generally favorable toward using credit to purchase luxury goods and the lower class users tended to use their for durable and necessity goods.

A series of experiments conducted by Berkowit and LePage, (1967) provided an insight into the impact of the credit cards on consumer spending. Labeled the weapon effect, Berkowitz and LePage found that being exposed to an aggressive stimulus led to aggressive behavior. In the realm of consumer behavior, credit cards can certainly be construed as promoting spending by making the transaction simpler or by removing the need for money.

Feinberg (1986) found that college students who were exposed to a credit card logo were more likely to purchase, decide to purchase quicker and spend more than students who were exposed to the same products without the presence of a credit card logo. Feinberg concluded that the students have been conditioned to associate credit cards and spending. The findings of the study are similar to Berkowit and Lepage

(1967) who found that credit cards promote spending. Both studies did not look at how the credit card usage would affect the financial performance of the commercial banks.

Muriu (2007) did a research on a survey of challenges facing the growth in use of plastic credit and debit cards in Kenya to identify the challenges the card industry is facing on the usage of the plastic cards in Kenya, to identify the determinants of growth in usage of the plastic cards and document the current trends on the use of the plastic cards in Kenya. The finding was that marketing is limited in that the products for credit card are not mass product. Vetting of new entrant in credit cards is very restrictive. Different banks who are majority issuers of these cards tend to segment their market and thus joint marketing promotions are very little help. He also found out that the customers do not apply for the credit card because they fear debt, some are risk averse and others fear fraud. The study did not touch on how the challenges facing the credit card industry will affect the financial performance of commercial banks in Kenya hence a knowledge gap.

Odhiambo (2012) did a research on credit cards and performance of commercial banks portfolio in Kenya and particularly Migori town. The study sought to determine the relationship between adoption of credit cards and credit card holder's satisfaction and to establish whether adoption of credit cards has improved commercial banks performance. The results showed that credit cards have contributed positively to satisfaction of credit card holders and adoption of credit cards improved commercial banks revenue. This was a more specific study hence a need to carry out study on the effect of credit card usage on performance of all the commercial banks.

The research gap is that few studies have examined credit cards effect on performance of commercial banks based on bank revenue. Therefore this study seeks to answer the question; "Does credit card usage affect the financial performance of commercial bank in Kenya?"

1.3 Objective of the Study

To establish the effects card usage of credit on the performance of commercial banks in   Kenya.

1.4 The Value of the Study

The findings of the study will benefit to the following:

The study aimed at assessing the effect the credit card usage has on financial performance of and financial development of commercial banks. The seminal character of this work had added to the literature by proposing some hitherto unexplored dimensions of financial development.

The financial services industry in that the study analyses the various credit card products and services benefits to commercial banks and their impact on the productivity of banks hence the findings of the study provide the industry with better understanding of customer perception of credit card usage.

To academicians and researchers in that the study provides relevant measures that could guide future research as well as the base from which research studies can be done.

The study benefits the commercial banks managers because it provides them with knowledge of how the credit card business affects the performance of commercial banks and this influences them positively to bring more business to the banks and come up with better ways of promoting the credit card.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the various studies that are relevant to credit card usage and commercial banks performance. It also presents the relevant theories that explain the credit card usage and organizational performance; literature on empirical studies conducted on credit card usage and organizational performance, credit card usage as well as organizational performance.

2.2 Theoretical Review

2.2.1 Transaction Cost Theories

This was developed by Schowartz (1974) and it states that suppliers may have an advantage over the lenders in checking the real financial position or the credit worthiness of the clients. In relation to the credit card usage, the bank is in better position to know the credit worthiness of a cardholder by evaluating the six months statements and the pay slip at the point of application of a credit card. The bank can also decide to review the credit limit of the cardholder by assessing how the customer has been using the credit card and how the customer has been making the payment.

Trade credit may reduce the transaction costs of paying bills (Ferris(1981). Rather than paying bills every time goods are delivered, a buyer might want to cumulate obligations and pay them only monthly or quarterly. This will also enable an

organization to separate the payment cycles from the delivery schedules. There may be strong seasonality in consumption patterns for a firm's products. In order to maintain smooth production cycles, the firm may have to build up large inventories. This has two costs: the cost of warehousing the inventory and the costs of financing it. The firm could lower the prices in order to affect early sales but there could be menu costs in doing this as well as a loss in discretionary ability. By offering trade credit selectively, both across customers and over time, the firm may be able to manage its inventory position better (Emery 1987).

In relation to the credit card, different credit card products in the bank are due for payment in different dates during the month. This will make the customer choose a credit card product which is convenient as far as making payments is concerned. The bank will divide the payment cycles within the course of the month so as to utilize the available funds from the customer.

2.2.2 The Efficiency Theory

Anthanasoglou et .al. (2006) came up with the efficiency hypothesis which posits that banks earn high profits because they are more efficient than others. There are two distinct approaches within the efficiency; the X- efficiency and Scale-efficiency hypothesis. According to the X-efficiency approach more efficient firms are more profitable because of their lower costs. Such firms tend to gain large market shares which may manifest in higher levels on market concentration but without any casual relationship from concentration to profitability The scale approach emphasizes economies of scale rather than differences in management or production technology.

Large firms can obtain lower unit cost and higher profits through economies of scale. This enables firms to acquire large market share which may manifest in higher concentration and then profitability (Anthanasoglou et al.2006).

2.2.3 Agency Theory

According to Jensen and Meckling (1976) described the agency relationship as a contract in which a person (principal) hires a second person, the agent, to perform an action. The principal will delegate the decision making authority to the agent. Jensen and Meckling (1976) began by assuming that each party to the contract consistently chooses those actions that are likely to satisfy their own interest. Although an agent's motivation may include the desire to work hard to achieve the principal's goals, he may also be motivated by desire to maintain the prestige or perquisites associated with the job.

For the case of credit card usage, the bank is the principal and the credit cardholder is the agent. The bank expects the cardholder to make use of the credit card properly making purchases using the card and repaying it on time. This is because it will be the way the bank can be able to increase the asset levels through the commission they are paid by the merchants and the interest the cardholder pays at the end of the month.

The cardholder also expects the bank to advise him/ her on any changes done on the credit card terms, making sure that the card can be used and that it is properly maintained.

2.2.4 Product Quality Theory:

Smith (1987) said that the trade credit relation gives rise to two problems; sellers do not know the real credit worthiness of their buyers and the buyers do not know the quality of the product the seller is issuing. In this study, the bank does not know the real credit worthiness of the cardholder and the cardholder does not know whether the credit card being issued by the bank will serve the purpose as per the expectation of the cardholder.

Smith (1987) suggests that there is a model where sellers offer two part credit terms because they can know who will be able to pay faster than the financial intermediaries. He continues to say that with asymmetric information about product quality, sellers after trade credit to allow buyers to verify product quality before payment. With the credit cards, the buyer does not know the real credit worthiness of applicants of the credit card and also there are situations where the credit card carries some hidden charges that the applicant is not aware of. Smith (1987) suggests that the bank should commit to review periodically the credit cardholder's performance after the credit limit can be reviewed upwards or downwards.

2.3 Determinants of Financial Performance of Commercial Banks

Performance is the outcome of all the organization's operations and strategies (Wheelen & Hunger, 2002). Organization's performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the morale and ethic.

Financial performance emphasizes on variables related directly to financial report. Company's performance is evaluated in three dimensions: company's productivity of processing inputs into outputs efficiently; profitability dimension or the level at which the company's earnings are bigger than its costs and market premium dimension or the level of which company's market value is exceeding its book value(Walker,2001).

A study was conducted by Joseph (2013) on determinants of organizational performance by tier three commercial banks of Kenya where he listed the below factors:

2.3.1 Corporate Governance

Christopher (2009) stated that proper governance of companies would become as crucial to the world economy as the proper governance of countries and will converge in associated issues of competitiveness, corporate citizenship, social and environmental responsibility. The governance of banks becomes even more pronounced considering their role of financial intermediation in developing economies. Commercial banks are the main providers of funds to enterprise and where there is a thin or absent capital market, their failure becomes the failure of the system.

Sanda, Mikailu and Garba (2005) examined the relationship between banks ownership and several governance aspects and found out that increasing ownership stakes for hired managers and board improves banks performance.

2.3.2 Technological Advancement

Today's business environment is very dynamic and experiences rapid changes as a result of creativity, innovation, technological changes, increased awareness and demands from customers (Woherem,2006). Business organizations especially the banking industry of the 21st century operates in a complex and competitive environment characterized by the changing conditions and highly unpredictable economic climate with Information and Communication Technology (ICT) is at the center of this global change curve. Abroad opening has been experienced around the world for banks and they are currently taking due advantage of these innovations to provide improved customer services in the face of competition and faster services that enhance productivity (Ovia ,2005).

2.3.3 Firm Size

If the relative size of the firm expands, its market power and profit increases. This is the Market- Power (MP) hypothesis. The hypothesis is also referred to as the Structure- Conduct- Performance (SCP) hypothesis (Athanasonglou*et al.,* 2008. It has been argued that the effect of growing size on the bank profitability is significantly positive to a large extent (Smirlock, 2005). Smirklock (2005) further suggested that the difference in profitability among large and small banks is due to production technologies and outputs, which vary across them. The relative efficiency hypothesis (Clarke et al., 2004) presupposes that larger banks (where size is measured by assets) are more efficient than smaller ones, and are more profitable as a result of this superior efficiency.

2.5 Empirical Studies

Several empirical studies have been conducted concerning the credit card usage and the performance of commercial banks.

Muriu (2007) conducted a study on a survey of challenges facing the growth of plastic credit and debit cards in Kenya. A sample of 30 cardholders was taken. Data analysis method used was content analysis for the cardholders and qualitative analysis for card issuer manager. The study found out that marketing is limited in that products for example products like the credit card are not a mass product. Vetting of new entrants in the credit card is very restrictive. The study also found out that customers do not apply for credit cards because they fear debt, some are risk averse and others fear fraud for both credit and debit cards .

Mutua (2010) carried out a study on the key success factors and bank strategy in the credit card industry: a survey of commercial banks issuing credit cards in Kenya. He studied 12 commercial banks. The research used primary sources of data since the objective was to identify the perception of commercial banks issuing credit cards on key success factors and establish the extent to which they have a related strategy for factors identified. Descriptive statistics were used to transform the data collected into standard form for relative comparison. The study found out that the key success factors that were very important in influencing customer use of bank products and service were service quality, technology, marketing, human resources, pricing, finance and research and development.

Makio (2010) conducted a survey on the factors affecting the use of credit cards: a case study of Post bank employees. Data was obtained from 23 staff from other departments and from post bank card centre. Data collection was facilitated through a questionnaire and the respondents were made up of 52% male and 48% female. The study found out that top management has credit cards while majority of middle management and lower management do not have credit cards. The survey also found out that factors affecting the use of credit cards were credit card fraud, awareness creation, complaints on the predetermined issues like merchant service commissions fees and the credit card system in the bank among many other factors.

Odhiambo (2012) did a study on credit cards and performance of commercial banks portfolio in Kenya. He studied six commercial banks in Migori town and all were involved in data collection thus the bank managers were all interviewed. The sample size of 120 credit cardholders was drawn from the bank records. The researcher designed a questionnaire for the credit cardholders which sought their opinion on satisfaction with the use of the credit card. The questionnaires were randomly distributed to credit cardholders who were asked to indicate the extent to which they agree or disagree with the statement. The Five-Point Likert's scale having the ratings was used to seek their opinion .Product Moment Correlation Coefficient was used to show the strength of the relationship between credit cards usage and customer satisfaction at 5% level of confidence. Linear regression analysis was used to establish the relationship of commercial bank portfolio and credit cards in terms of customer satisfaction, and chi-square was employed to gauge bank manager's opinion on contribution of credit cards to generate bank revenue. The findings revealed that

there was a positive correlation between the usage of the credit card and the bank portfolio. This research is specific to Migori town meaning there is a research gap which requires to be filled on all the commercial banks in Kenya.

Kamal (2012) conducted a study on the Electronic credit card usage and their impact on Bank's profitability: The Rate of Return on owner's equity model. The purpose of the study was to know the effect of using the electronic credit cards which included the number of electronic credit cards, the proportion of investment in credit cards, and the operation expenses to the credit cards and explaining its effect in the net income from credit cards and showing the effect of the net income from the credit cards for the bank's profitability by using return on equity model. The study was applied on a sample of commercial banks working in Jordan, the information and data were collected from annual reports given by the banks and by returning to the credit management in commercial banks. To analyze the study data and test its hypothesis, the (SPSS) system was used. In order to answer the questions in the study, the equation a simple regression analysis was used. The study found that there is a positive effect between the number of credit cards, the net income from credit cards and the profitability of commercial banks (ROE). This study was done in Jordan and there is need to carry out the same study in Kenya.

Kibe (2013) carried out a study on the effect of credit card default on the financial performance of the Kenya Commercial Bank. The independent variables were number of accounts closed, non-performing loan and bad debts written off and the depended variables were Earnings per Share, Dividends per Share, Loans to customers, total assets and customer deposits. The research findings were that Gold card holders are

the majority of the cardholders in KCB at 56%. Further majority of the cardholders are men with a proportion of 53% and women 47%. In terms of revenue, although gold card has the highest number of card holders (56), it only contributes 33% of the revenue collected through credit cards. In terms of credit card default, 100% of all the holders of local credit cards are defaulters. This research concluded that the proportions of credit card holders, revenue collected as well as the amounts and proportion defaults from credit cards vary between different types of cards. In addition, Kibe discovered that credit card default negatively affects the bank performance on EPS, DPS, customer deposits as well as total assets. Additional knowledge is required on how the credit card usage will affect the usage of the credit cards.

Muiru (2014) did a study on effects of financial innovation on financial performance of commercial banks in Kenya. The study was guided by the following objectives; to establish whether the credit card cards affect the financial performance of commercial banks in Kenya; to determine the influence of internet banking in financial performance of banks in Kenya and to determine the influence of agency banking on the profitability of commercial banks in Kenya. The population of study consisted of forty four commercial banks that are currently operating in Kenya. The target population was sixteen banks and at least four members of management. Analyzed data was summarized and presented in the form simple frequency tables of ratio counts and graphs. The study found that some banks in Kenya had adopted some financial innovations such as credit cards, mobiles, internet and agency banking. The financial innovations had a great impact on the financial performance of banks. From

this study, there is a need to be more specific and study a single area of financial innovation that is the credit card usage and the performance of commercial banks.

2.6 Summary of the Literature Review

Research done by Deloitte on charting a new course of the credit card stated that due to the changes in the fortunes of the credit card industry, the credit card companies must now adhere to much more stringent requirements for transparency to meet the spiraling consumer and merchant demands. The issuers must enhance their financial disclosures and introduce new payment products. The industry must also determine how to compete effectively against the non- traditional players in its bid to retain profitability.

In response to the market forces, issuers are considering a number of options- from exiting the business to redefining their business and operating models. Some companies have set up project management offices to execute a number of quick changes to the products, pricing and lines of credits. Other issuing companies may decide to remain but to retrench by eliminating lines, reducing expenses and lowering the risk profile. Another approach would be to launch a short- term marketing, product and operational initiatives.

These approaches may not be sufficient given the degree of change the industry is experiencing. Issuers may need to fundamentally rethink their business models if they are to respond to new economic conditions and capitalize on new opportunities. When planning ahead, it is critically important to distinguish between short-term pressures

and longer- term shifts that will transform the structure of the industry, particularly through the advent of new technology.

Kibe (2013) from her study concluded that credit card default negatively affects the performance of commercial banks on EPS, DPS, customer deposits as well as total assets. Odhiambo (2012) concludes that there is a positive correlation between the usage of the credit card and the bank portfolio. This agrees with a study done by Kamal (2012) whose findings was that there is a positive effect between the number of credit cards, the net income from the credit cards and the profitability of the commercial banks (ROE). Muiru (2014) also concludes that financial innovation has a great impact on the financial performance of banks and since credit card is part of the commercial banks financial innovation, the study agrees with Odhiambo (2012) and Kamal (2012).

From the above studies, it is evident that very few studies have tried to establish the effect of credit card usage on the performance of commercial banks. Kamal (2012) did her studies in Jordan and Odhiambo (2012) did his studies in Migori town. The studies are few and there is need to carry out more studies in order to ascertain the authenticity of the findings.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes how the study was conducted, expounding on the steps and the procedures involved in Research design, Study population and sample, Sampling method, Data collection and Analysis. This chapter as well expounds on the data size, the data collection methods and the instruments involved at each stage.

3.2 Research Design

This section gives the blueprint for the study, highlighting on which questions was studied, which data was relevant, what data was collected, and how the results were analyzed. Research Design is a logical and systematic plan for directing a research study. It specifies the objectives of the study, the methodology and techniques to be adopted for achieving the objective(s) (Mugenda and Mugenda, 2003). This was done as a causal study, as it was conducted to identify cause-and-effect relationships among variables. A casual study involves an investigation of what causes the other among different variables (Chandran, 2004). Causality approach to this study will be most preferred because the study will be investigating whether the usage of credit cards by customers causes increase or decrease in banking profits. This study adopted both descriptive and explanatory research design. First, the study described the trend of bank performance, adoption and use in banking sector. Second, the explanatory

approach was used in investigating existing relationship between bank performance and credit card usage and carefully test the causal research objective of the study.

3.3 Population

Cooper and Emory (1995) define population as the total collection of elements about which the researcher wishes to make some inferences. Element is the subject on which the measurement is being taken and is the unit of study, according to Cooper and Emory (1995). This was a census study of 7 Commercial which were offering the credit card during the period under study

3.4 Data Collection tools

For the purpose of this study, secondary data was used. The data required for the study was drawn from the Central Bank of Kenya Annual reports for all the years under study. The data covered the period between 2009 to 2013. This duration was considered appropriate since there has been a great increase in the usage of the credit card hence it will be prudent to find out how this has affected the performance of commercial banks.

3.5 Data Analysis

This study investigated the effect of the credit card usage on the performance of commercial banks, that is; whether the credit card usage will increase or decrease the profitability of commercial banks. The data which collected entailed the return on assets of the commercial banks in Kenya, the total number of credit card transactions done by the customers, the total amount of credit card transactions in Kenya shillings, the number of credit cards issued by the commercial banks within a certain year, the

size of the banks and the age of the 7 commercial banks issuing credit cards (see appendix 1).The study used both descriptive and inferential statistics in analyzing the data.

The data collected was sorted and organized before capturing the same in Statistical Packages for Social Sciences (SPSS) for analysis. Descriptive statistics such s mean score, frequencies and percentages for each variable was calculated and tabulated using frequency distribution tables, pie charts and/ or bar charts. In order to test the relationship between the variables, inferential tests including the Pearson Product – Moment Correlation Coefficient and regression analysis was used. The relations were explored with the use of Pearson's correlation coefficient. This was used to calculate the relationship between two variables. Pearson Product- Moment Correlation Coefficient as a measure of association was used to examine the relationship between credit card usage and financial performance. Correlation co-efficient is the measure of the strength of linear association between two variables.

Correlation is always between -1.0 and +1.0. If the correlation is positive, there will be a positive relationship meaning if when there is an increase in credit card usage the financial performance of commercial banks goes high and the vice versa if the relationship will be negative.

A regression analysis was conducted to assist the researcher establish the effect of credit card usage on the financial performance of commercial banks in Kenya.

3.6 Analytical Model

In order to make the regression analysis possible, the study adopted the following analytical model:

The general model is given as:

Y = f(x1, x2, x3, x4, x5)

Because we are using skewed data distribution we will normalize the data by applying line-log regression model. Therefore our specific model is described below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where

Y = Financial performance of commercial banks in Kenya captured by Return on Assets

X1 = Natural log of credit cards

X2 = Natural log of number credit card transactions

X3 = Natural log of transaction volumes of credit cards

X4 = Leverage ratio of the banks

X5 = Age of the banks

ε = The error term

This model stems directly from the literature review on the determinants of financial performance where these determinants are used in the model as a control variable and is modified from Goh et al., (2013). Under this model, the dependent variable is financial performance (FP) which is measured using the profitability index of return

on assets (*ROA*). The independent variable is number of credit cards (*CRD*) measured as the total number of credit cards issued by the seven commercial banks. The control variables are number of credit cards transactions (*CRDT*), transaction volumes of credit cards (TVOL), leverage (*LV*) used to control for capital structure commercial banks a firm and age of the firm (*AGE*) used to control for the differences in age of the banks. These variables are defined in Table 3.5.1

Table3. 1Variable description

Variable	Description
CRD	Natural logarithm of the number of credit cards issued by the seven commercial banks
CRDT	Natural logarithm of the velocity of credit cards transactions
CRDVOL	Natural logarithm of transaction volumes of credit cards
LV	Total liabilities divided by total assets at the end of the year
FP	This is the financial performance measured by the Return on Assets (ROA). ROA is calculated as the Net income divided by the total assets
SZ	Natural logarithm of the book value of total assets at the end of the year
AGE	Age of the banks measured by difference between current year and the year of incorporation

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The main objective of the study was to investigate the effects of credit card usage on the performance of commercial banks in Kenya. The study focused on 7 Commercial which were offering the credit card during the period under study. The study used descriptive and inferential analytical techniques to analyze the data obtained. Ordinary Least Squares (OLS) regression models were employed for analysis. Before running the regressions, descriptive statistics and correlation analysis were calculated. Correlation analysis shows the relationships between the different variables considered in the study.

4.2 Descriptive Statistics

Table 4.3 presents the descriptive statistics and the distribution of the variables considered in this research: financial performance (FP), number of credit cards (CRD), credit cards transactions (CRDTRA), transaction volumes (TRAVOL), leverage ratio (LV) and age. The descriptive statistic considered were minimum, maximum, mean, standard deviation, skewness and kurtosis.

From Table 4.2, financial performance of the seven commercial banks for the five period of the study registered a mean of 0.2056 and standard deviation of 0.00253. That is, return on assets, on average, 20.56% of net income to total assets of the commercial banks. This illustrates that commercial banks generated a net income of Ksh 0.2056 for every one shilling invested in assets. However, the value went as high as 39.5% and as low as 1.55%. On average, the number of credit cards issued by the

seven commercial banks was 95,581 with a maximum number of credits issued

standing at 205,500. Credit card transaction and transaction volume registered a

maximum of 3.8 million and 35.25 million respectively. The ratio of the commercials

banks liability to total assets had a mean of 0.2051 with maximum leverage ratio

reported at 0.365. On average, the seven commercial banks had been in operation for

at least 35 years since the year of inception

Table4.2 Descriptive Statistics

	FP	CRD	CRDTRA(000,000)	TRAVOL(000,000)	LV	AGE
Mean	0.2056	95581	2.6	20.021	0.2051	35
Maximum	0.3952	205500	3.8	35.25	0.36588	65
Minimum	0.0155	65015	1.5	15.102	0.1361	25
Std.Dev	0.00253	51.251	0.005	0.521	0.0563	2.521
Skewness	0.4379	2.2546	1.9164	1.6933	2.0014	0.39
Kurtosis	3.5331	9.7382	8.7543	7.1614	8.0463	2.3582
Obs	5	5	5	5	5	5

Figure 4.1 below shows the trend of the number of credit cards across the study

periods from 2009 to 2013. As indicated by the graph the number of credit cards

issued by the commercial banks increase between 2009 and 2013. The gradual

increase in the number of credit cards in circulation is attributed to the adoption in

technology by the commercial banks and the expansion strategy by the banks.

4.2.1 Number of Credit Cards

Figure 4.1 below shows a gradual increase in the number of credit cards issued by the

commercial banks during the study period. The number of credit cards increased from

the year 2009 to 2013. This depicts that commercial banks adopted new technology in

providing faster financial services to the clients

Figure 4.1Number of credit cards
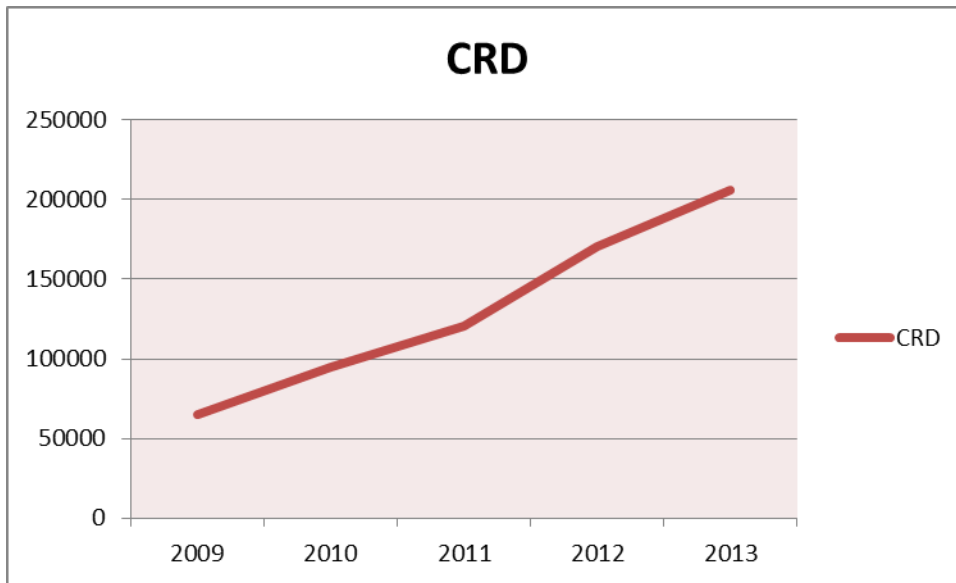
4.2.2 Return on Assets for between 2009 and 2013

The figure below show that the financial performance for the seven commercial banks in Kenya between 2009 and 2013. In 2009, banks registered a rate of return of 0.0155 followed with a ROA of 0.1523 in 2010. A high rate of return was reported in 2013 with a ratio of 0.3952. Generally, gradual increase in financial performance was reported in during the study period.

Figure 4.2 Return on Assets
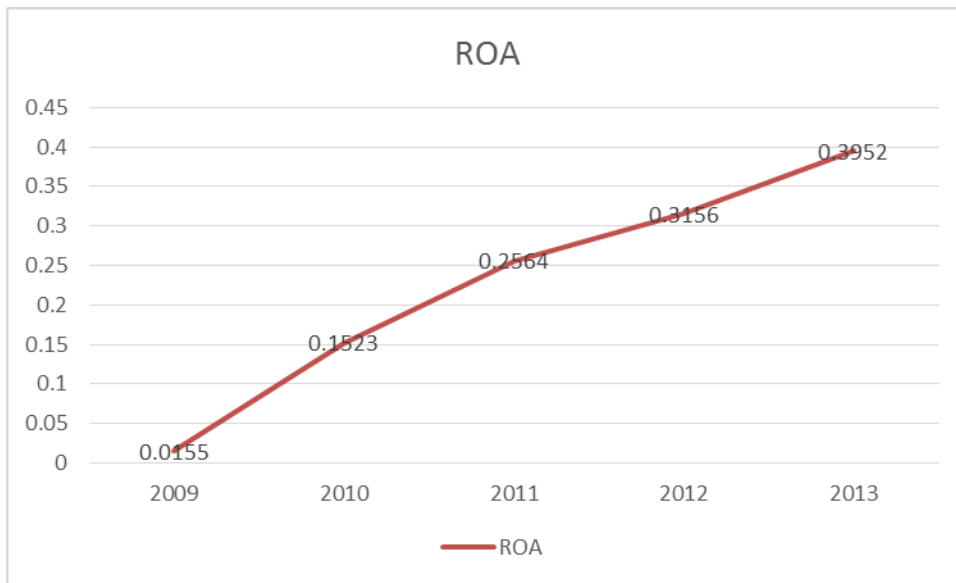
4.2.3 Return on Assets and Credit Cards

Figure 4.4 above shows that the number of credit card transactions increase alongside with the number of credit cards issued by the seven commercial banks. Increase in client base by the commercial banks means long queue in the banking halls therefore customers opted to use credit cards for transactions. Increased transactions using credit cards increased the interest earned by the commercial banks on the usage of credit cards.

Figure 4.3 ROA and Credit Cards Issued
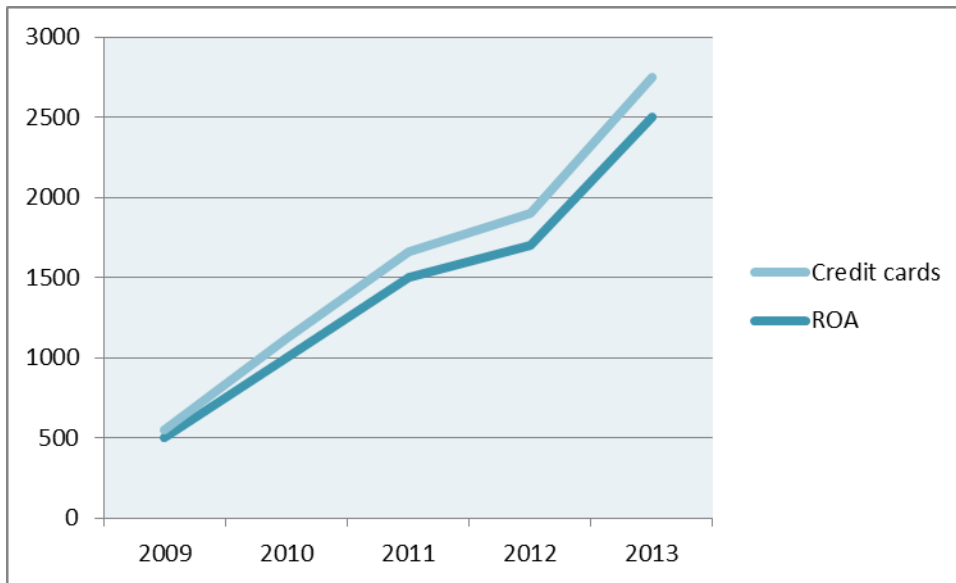
4.2.4 Transactions Volumes and Credit Cards

Figure 4.4 below shows an increase in transaction volume with an increase in the number of credit cards issued by the commercial banks. Shopping malls and petrol stations have been installed with credit machines which increases the transaction volumes of credit cards.

Figure 4.4 Transaction volume and Credit cards
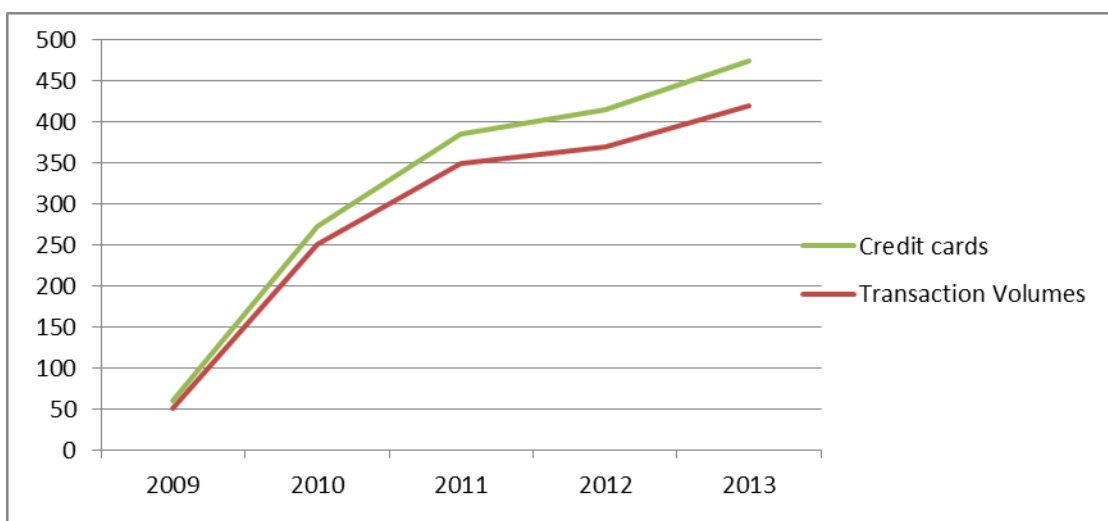
4.3 Correlation Analysis

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient for short) is a measure of the strength of a linear association between two variables and is denoted by r. The Pearson correlation coefficient, r, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases

The study sought to establish the relationship between dependent variable and the explanatory variables. Pearson Correlation analysis was used to achieve this end at 99%, 95% and 90% confidence levels.

	CRD	CRDTRA	TRVOL	LV	AGE	FP
CRD	1					
CRDTRA	.34	1				
TRVOL	.25	.86	1			
LV	-.35	-.54	1			
AGE	.56	.21	.253	1		
FP	.612	.451	-.2514	-.36	.75	1

Table4.3 Correlation Matrix

Table 4.3 above indicates that financial performance has a strong positive correlation with the number of credit cards (R= 0.612). This implies that an increase in the number of credit cards will increase financial performance of the commercial banks. The result also illustrates moderate but positive relationship between financial performance and the age of the commercial banks (R= 0.56). Leverage ratio is negatively associated with the financial performance of the commercial banks. This depicts that an increase in the financing of short term liabilities will reduce the profitability of the commercial banks. Transaction volume recorded weak but positive relationship (R= 0.25) with the financial performance of the commercial banks.

4.4 Regression Analysis

Regression analysis was used to determine the determinant of coefficient (model summary), analysis of variance (ANOVA) and to generate the regression coefficient. A test of significance was also carried out to determine if the variables are significant in explaining the variation in the financial performance of the commercial banks under study.

4.4.1 Model Summary

Determination coefficients (R^2) were also carried out to determine the strength of the relationship between independent and dependent variables. The study established R^2 of 0.8368. R^2 of 67.2% indicates that 67.2% of the variation in financial performance of the commercial banks is attributed to the changes in the explanatory variables. The Durbin-Watson test statistic tests the null hypothesis that the residuals from an ordinary least-squares regression are not auto correlated. The Durbin-Watson statistic ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value

toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. Since the DW value of 1.977 was close to 2, then it can be concluded that there was no autocorrelation among the model residual.

Table 4.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
					Sig. F Change
1	.403	.672	.653	.02127	1.977

Predictors: (Constant), CRD, CRDTR, TRVOL, LV, AGE

Dependent Variable: Financial performance

4.4.2 Analysis of Variance

Analysis of Variance's (ANOVA) from table 4.4 F-test was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables); thus, helping in bringing out the significance of the regression model. Since p value (p=0.023) is less than 0.05 and it also implies that there is statistical significant difference between the means of the dependent and explanatory variables.

Table4. 3 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.045	5	.123	.6949	0.033
	Residual	5.102	7	.177		
	Total	6.147	13			

4.4.3 Regression Coefficient

Table 4.4.2 below gives a summary of the regression coefficient of the model. All the explanatory variables are statistically significant at 5% level of significance in explaining the variation the financial performance of the commercial banks. The number of credits cards, credit cards transactions and age of the commercial banks are positively associated with the return on assets of the commercial banks. However, leverage ratio and the transaction volume is negatively associated the financial performance of the commercial banks.

Table4. 4 Regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	13.80	.282		3.99052	.010
CRD	-.005	.000	.3163	2.48	.034
CRDTR	.071	.012	1.638	-2.02	.023
TRVOL	.045	.057	-.247	-.7001	.035
LV	.029	.030	-.0356	.34	.035
AGE	.058	.035	.027	-4.14	.0005

a. Dependent Variable: Net Operating Income

b. Independent Variable: CRD, CRDTR, TR VOL, LV, AGE

From the regression coefficient result above, the estimated model of the study becomes:

$$Y = 13.80 + 0.3163X_1 + 1.638X_2 - 0.247X_3 - 0.0356X_4 + 0.027X_5$$

4.5 Summary and Interpretation of the Findings

Holding other factors constant, commercial banks will realize an average of 13.80 units increase in return on assets. This implies that one unit invested in other factors that are not considered in the study will generate a net income of 13.80 units. Number of credit cards issued by the commercial banks is statistically significant (t= 3.99052, p= 0.010, p<0.05) and positively correlated with the financial performance. A unit increase in the number of credit cards issued by the seven commercial banks will lead to 0.3163 units increase in the return on assets. The findings also established that credit card transactions is statistically significant (t=2.48, p=0.034,p<0.005) in explaining the changes in the financial performance of commercial banks. A unit increase in credit card transactions will lead to 1.638 units increase in the profitability of the commercial banks. Transaction volume is significant (t= -0.7001, p=0.035) in causing variations in the financial performance of the commercial banks. However, negative coefficient was established indicating that a unit increase in transaction volume will lead to 0.247 units decrease in the financial performance of the commercial banks. Leverage ratio was found to be significant (t=0.34, p=0.035). This indicates that a unit increase in leverage ratio will lead to 0.0356 units decrease in the financial performance of the commercial banks. There is statistical significance (t=-

4.14, p=0.0005) between age and financial performance of the commercial banks. A unit increase in the number of years of the operations of the commercial banks will lead to 0.027 unit increase in financial performance of banks

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of finds, conclusion, recommendations and suggestions for further research derived from the findings. The chapter also presents the limitations that were encountered with suggestions for further research.

5.2 Summary of Findings and Discussion

The main of the objective of the study was to investigate the effects of card usage t on the performance of commercial banks in Kenya. A census study of seven commercial banks spanning from 2009 to 2013 indicated that credit card usage has positive impact on the financial performance of the commercial banks. Result of data analysis from chapter four indicated that credit card has strong and positive relationship with financial performance with determinant of coefficient of 0.612 (R=0.612). This implies that increasing the usage of credit cards will lead to an increase in the financial performance of credit cards. Regression result from chapter four also indicated that credit card usage is statistically significant in causing the changes in the financial performance of commercial banks. This is achieved by a p value of 0.010 which is less than 0.05.

The findings also established that credit card transactions are statistically significant in explaining the changes in the financial performance of commercial banks. A unit increase in credit card transactions will lead to 1.638 units increase in the profitability

of the commercial banks. The result from chapter four indicated that Transaction volume is significant in causing variations in the financial performance of the commercial banks. However, negative coefficient was established indicating that a unit increase in transaction volume will lead to 0.247 units decrease in the financial performance of the commercial banks. Leverage ratio was found to be significant factor in determining the profitability of the banks. This indicates that a unit increase in leverage ratio will lead to 0.0356 units decrease in the financial performance of the commercial banks.

5.3 Conclusion

The findings is consistent with transaction cost theory by Schowartz (1974) which states that suppliers may have an advantage over the lenders in checking the real financial position or the credit worthiness of the clients which stipulates that in relation to the credit card usage, the bank is in better position to know the credit worthiness of a cardholder by evaluating the six months statements and the payslip at the point of application of a credit card.

The result is also in line with the agency theory developed by Meckling (1976). The bank expects the cardholder to make use of the credit card properly making purchases using the card and repaying it on time. This is because it will be the way the bank can be able to increase the asset levels through the commission they are paid by the merchants and the interest the cardholder pays at the end of the month which increases the financial performance of commercial banks

The finding is also consistent with Odhiambo (2012) who contends that credit cards contributed positively to satisfaction of credit card holders and adoption of credit cards improved commercial banks revenue. This is because credit cards promote spending by consumers hence generating income in to the commercial banks in the form of interest rates charged. The result further reinforce Hirschman (1986), conclusion that people who own more credit cards make larger purchases per department store visit and that restaurant tips are larger when payment is by card .

Our study findings also indicated that the number of transaction of credit cards positively impact on the financial performance of commercial banks. Credit card usage is increases the profitability of commercial banks. Credit cards are very convenient mode of purchasing goods and very acceptable mode of payment in merchant outlets hence more profits to the banks through the interchange fees paid by the merchants, late payment charges to the customers, annual fees, card renewal fees and the interest charges to the customers.

Age of the commercial banks has a positive influence on the performance of the banks as indicated by the study finding. The probability of innovation and productivity growth change across the bank with the increase in the number of years the banks have been in operation (Huergo and Jaumandreu, 2004). Older banks have the financial muscle in the form of a pool of resources that they can use for investments; diversification and they also enjoy the economies of scale.

Leverage ratio has a negative impact on the financial performance of the banks. The finding is consistent with Kartz et al (2013) who found that on average, the main components of current profitability: margins, utilization of assets and operating

liability leverage, result in lower future profitability for tax aggressive firms as compared to firms that are not tax aggressive

5.4 Limitation of the Study

The study used a sample of seven commercial banks in Kenya. However, thesample size used is not representative of the population of the study considering that there are over forty three commercial banks in Kenya. Inference from the finding would therefore be misleading for policy makers.

The study was conducted spanning from the year 2009 to 2013 making a sample size of the time of five years. However, in statistical analysis involving regression requires that the time period should be at least 30 years. This implies that some variables which are significant might not have been significant if a large sample size was used.

Some commercial banks were not willing to reveal all their financial information which casts doubt on the validity of the data used in this study.

5.5 Recommendations

5.5.1 Policy Recommendations

Since credit usage increase the financial performance of the commercial banks, the study recommends that commercial banks should revise the interest rate charged on the credit cards. This has the end effect of encouraging consumers increase the usage of credit cards.

Commercial banks should also collaborate with SME to install credit card machines for use by consumers. Most transaction by consumers takes place at shopping malls

and petrol stations. However, the cost of installation and technology might be too expensive for small medium enterprise.

Credit cards positively contribute to the financial performance of commercial banks as indicated by the study findings. Currently very few consumers hold credit cards due to the restrictions and requirements imposed by the commercial banks. Commercial banks should expand the market segments for consumers who are qualified to use credit cards. However, both standard and enhanced due diligence should be conducted before issuing credit cards to consumers. Banks should also enhance credit risk management by incorporating high technology to mitigate cases of fraud and credit loss provisions.

The central banks of Kenya should revise the policies and regulation of central reference bureau (RB) by making it a policy to subject

5.5.2 Suggestions for Further Studies

Future studies should use a representative sample of the commercial banks in investigating the effect of credit card usage on the financial performance of banks.\

Further studies should be conducted using quarterly data to improve on the sample size of the data.

Data for a research of this nature should be sourced from than two sources. This is because financial institutions do not always reveal their true financial position in the annual financial statements

Credit card holders have easy access to money which they repay with interest after a certain period of time. Credit cards therefore substitute loans hence there is need for

further research to be done on the impact of credit cards on the loan volume granted

by the commercial banks.

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APPENDICES

Annex I: List of Commercial Banks in Kenya Issuing the Credit Card

1. Barclays Bank of Kenya

2. Kenya Commercial Bank Limited

3. Co-operative Bank of Kenya Limited

4. NIC Bank Limited

5. Prime Bank Kenya Limited

6. I&M Bank Kenya Limited

7. Imperial Bank Kenya Limited

Annex II: Raw Secondary Data Kenya annual reports

Year	2009	2010	2011	2012	2013
Total Assets(000,000)	2052	2751	3545	4585	6580
Total liabilities(000,000)	1658	2351	3256	3900	5250
Age	35	45	50	53	65
Credit	65015	10525	120580		205500
Transaction Volume(000,000)	15102	1850	2068	2715	3525
Transactions(000)	1.5	1.85	2.24	3.15	3.8