THE EFFECT OF MACROECONOMIC VARIABLES ON THE FINANCIAL PERFORMANCE OF NON-BANK FINANCIAL INSTITUTIONS IN KENYA

BY:

GODFREY MAGETO ONGERI

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DECLARATION

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

Godfrey Mageto Ongeri,

Signature: ……..…

Date…….....…….

GODFREY MAGETO ONGERI D63/80532/2012

The research project has been submitted for examination with my approval as the University Supervisor.

Signature: …….

Date…….....…….

MR .HERRICK ONDIGO ,

LECTURER, DEPARTMENT OF FINANCE AND ACCOUNTING

SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI

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DEDICATION

I dedicate this project to my parents Mr and Mrs Paul Ongeri , grandfather(Mr Samson Mainya Mageto) and grandmother (Mrs Jerusha Mosiara) for their encouragement , motivation and prayers,

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LIST OF ABBREVIATIONS

BOP-Balance Of Payment

CBK-Central Bank of Kenya

DJIA-Dow Jones Industrial Average

EMH- Efficient Market Hypothesis

NBFI-Non-Bank Financial Institutions

GDP-Gross Domestic Product

KNBS-Kenya National Bureau of Statistics

KRA-Kenya Revenue Authority

KSh-Kenya Shilling

MFI-Micro-Finance Institution

MFB-Micro-Finance Bank

MPT-Modern Portfolio Theory

MRP-Money Remittance Provider

OLS-Ordinary Least-squares Regression

ROA-Return On Assets

ROCE-Return On Capital Employed

SSA-Sub Saharan Africa

USA-United States of Kenya

USD-United States Dollar

ABSTRACT

The purpose of this study was to determine the effect of selected macroeconomic variable on financial performance of non-bank institutions in Kenya. Studies have been done on the effect of macroeconomic variables on financial performance of commercial banks, microfinance Institutions and aviation sector. The measure for financial performance used was ROA measured against the macroeconomic variables such as inflation rate, currency exchange growth rate, average quarterly interest rate and quarterly GDP growth rate as macroeconomic variables.

The study used correlation and regression analysis research design. The study employed quarterly secondary data which was for a period of ten years from 2004 to 2013 on a quarterly basis for the NBFI sub sector comprising of 112 NBFIs. The data was obtained from the Central Bank of Kenya and Kenya National Bureau of Statistics .The data was analysed using SPSS .The findings are important to various stakeholders including NBFIs finance students etc. the study combined regression and correlation analysis in examining how macroeconomic variables affects financial performance.

The findings of the study indicate Return on Assets of NBFIs has a strong positive relationship with currency exchange growth rate (2.504) and a weak positive relationship with quarterly GDP (0.284), inflation rate (0.655) and average quarterly interest rate (1.107). In addition it can be stated that macroeconomic variable affected ROA with an adjusted R^2 of 0.119 meaning 11.9% is the variable in the regression model while 88.10% could not be explained by the variables .The main policy recommendation was that the government should control the interest rates charged by the NBFIs to encourage borrowing and investments which in turn improves the ROA of NBFIs.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The banking industry in Kenya has been a major accelerator to the growth of other industries and sector through their intermediation role of regulating the demand and supply of credit. Banking industry in Kenya comprises of both banking and Non-Bank Financial (NBFIs) Institutions. NBFIs are firms that undertake many of the activities of a commercial bank without meeting the legal definition of a bank as defined by Saunders & Cornett (2011).It is a financial institution that does not have a full banking license and cannot accept deposits from the public. NBFIs in Kenya are a source of consumer credit (along with licensed banks) and do facilitate bank-related financial services such as investment(both collective and individual), risk pooling, financial consulting, contractual savings, and brokering. Examples of these include insurance firms, pawn shops, venture capitalists, cashier's check issuers, check cashing locations, payday lending, currency exchanges, and some microloan organizations,

Carmichael and Pomerleano (2002) quote Alan Greenspan, a US Federal Reserve Chairman speaking before a World Bank and International Monetary Fund meeting in 1999 where identified the role of NBFIs in strengthening an economy, as they provide "multiple alternatives to transform an economy's savings into capital investment which act as backup facilities should the primary form of intermediation fail .NBFIs supplement banks by providing the infrastructure to allocate surplus resources to individuals and companies with deficits. Additionally, NBFIs also introduces competition in the provision of financial services. While banks may offer a set of financial services as a packaged deal, NBFIs unbundle and tailor these services to meet the needs of specific clients. Additionally, individual NBFIs may specialize in one particular sector and develop an informational advantage. Through the process of unbundling, targeting, and specializing, NBFIs enhances competition within the financial services industry.

NBFIs were initially established in the USA to get around interstate banking restrictions and restrictions on non-bank ownership of bank imposed under the1927 McFadden and the 1956 Bank Holding Company Acts. Banks comprise a large proportion of the financial sector in most countries but there are non-bank institutions which also contribute immensely to the financial sector performance..Because these NBFIs operate without a banking license, in some countries their activities are largely unsupervised, both by government regulators and credit reporting agencies. Thus, a large NBFI market share of total financial assets can easily destabilize the entire financial system. A prime example would be the 1997 Asian financial crisis, where a lack of NBFI regulation fuelled a credit bubble and asset overheating. When the asset prices collapsed and loan defaults skyrocketed, the resulting credit crunch led to the 1997 Asian financial crisis that left most of Southeast Asia and Japan with devalued currencies and a rise in private debt. Due to increased competition, established lenders are often reluctant to include NBFIs into existing credit-information sharing arrangements. Additionally, NBFIs often lack the technological capabilities necessary to participate in information sharing networks. In general, NBFIs also contribute less information to credit-reporting agencies than do banks.

In Kenya, NBFIs are licensed under the Banking Act and are obligated to comply with all requirements required of Banks subject to any qualifications stipulated for them. They offer a source of cheaper loans to borrowers who intend to undertake activities that are not business in nature like construction of residential house for one to occupy .This has been brought about by the by emerging economies which face population growth, rapid urbanization, and rising expectations from a growing middle class, the need for robust housing finance systems becomes very important. When housing finance systems are strong, families can more readily access comfortable homes, and have another vehicle for accumulating long-term wealth.(CBK 2014)

This has led to a rapid growth and transformation of many non-bank institutions to banks such giving small scale businessmen and women loans for the capital to start businesses. NBFIs came into being in order to fill the gap in the financial system and rectify inefficiencies in loan facilities. These specialized financial institutions supplement the availability of finance provided by commercial banks. The NBFIs are both public and private. These institutions mobilize savings, in competition with commercial banks. The

savings are then channelled into credit for commerce, agriculture, industry and household sectors .Kenya continues to develop a wider range of these financial institutions.

Jao (1976) puts it, this role of money and finance in economic development has been examined by economists from different angle and in various degree of emphasis. In particular, the writings of Gurley and Shaw (1967) and Goldsmith (1969) stress the role of financial intermediation by both banks and non-bank in the savings investment process, where money, whether defined narrowly or broadly, forms a wide spectrum of financial assets in the portfolio of wealth-holders.

According to Wagacha (2001), capital markets are essential part of the financial sector of modern economies and more so for growing economies. They provide an avenue for alternative savings tools to savers, banks and non- bank sources of financing for enterprises. Thus, capital markets promote economic growth through enhanced savings mobilization. He concluded that a well-developed capital market promotes economic growth through increased savings mobilization, access to foreign savings, spreading of financial risks, help the government finance their deficits while reducing the fiscal pressures of debt redemption by the maturities of the securities, and a facilitating role in translating savings to investments.

Some research suggests a high correlation between a financial development and economic growth. Generally, a market-based financial system has better-developed NBFIs than a bank-based system, which is conducive for economic growth. A multi-faceted financial system that includes non-bank financial institutions can protect economies from financial shocks and enable speedy recovery when these shocks happen. NBFIs provide “multiple alternatives to transform an economy's savings into capital investment, which serve as backup facilities should the primary form of intermediation fail.

However, in the absence of effective financial regulations, non-bank financial institutions can actually exacerbate the fragility of the financial system. Since not all NBFIs are heavily regulated, the shadow banking system constituted by these institutions could wreak potential instability. In particular, hedge funds, and structured investment vehicles, up until the 2007-2012 global financial crisis, were entities that focused NBFI supervision on pension funds and insurance companies, but were largely overlooked by regulators.

1.1.1 Macroeconomics Variables

According to Romer (2012) Macroeconomic is the study of the economy as a whole .That is it focuses on the behaviour of an entire economy-the "big picture" which can regional, national or international. In macroeconomics we worry about such national goals or aggregate indicators also referred to as variables. These variables include interest rates, economic output, employment and unemployment, huge population, inflation, government budget balances and finance, international trade balances and finance, and productivity (Muchiri, 2012).These macroeconomic variables play a major role in determining the financial performance of both banking and NBFIs.

In today's world, we have to innovatively interpret macroeconomic variables quite differently within the parameters of the global economic crisis and other external economic shocks as they occur, and we cannot apply the directly-observed macroeconomic variables in crisis situations in the same way as we do in a tranquil period. Aguiar and Broner (2006) believe that emerging market predicaments may be associated with huge movements in macroeconomic fundamentals and asset prices, and so there is all the more reason for making a distinction between directly-observed macroeconomic variables and a computed series of innovations to the macroeconomic fundamentals.

Inflation can be referred to a sustained or persistent increase in the general prices of goods and services in the long run. This is primarily brought about by the increase in earning which is not proportionate with the increase in the production of goods and services. Due to the case of more money chasing few goods general prices of goods and services are bound to increase leading to significant reduction in disposable income and the purchasing power of the low income earners bracket of population who comprise the majority and this ultimately leads to low level of savings and high rate of loan defaults. This ultimately affects the financial performances of lenders including the NBFIs.

Interest rate is the cost usually expressed as a percentage of the amount borrowed (principal) charged by a lender to the borrower for lending money .To the lender (NBFIs) it is a return or a source of revenue while to the borrower it is a cost. The interest rate is usually charged per month or per annum and is determined by and directly proportion to the risk levels of the

borrower. Amount borrowed should be invested in activities or use that generates more return than the lending rate to make economic sense.

Exchange rate is the amount of local or home currency required to purchase one unit of a foreign currency. According to .Schiller (2008), the interest rate is determined by the demand and supply of the foreign currency (BOP), trade balance, current account balance and capital account balance.GDP Domestic Gross Product (GDP) according to Wikipedia "is the market value of all officially recognized final goods and services produced within a country in a given period of time. GDP per capita is often considered an indicator of a country's growth.

Many developing countries have been able to withstand the external shock of the international financial meltdown, as a result of prudent financial management of their economies. All developing nations are being affected, directly or indirectly, by this international financial tsunami. A firm usually fails because of a combination of factors. The failure rates of corporations are determined by three factors i.e. firm risk which is dependent on the effectiveness of the management and adequacy of its capital; industry risk i.e. a shock to a specific industry such as its exposure to import reform, tariff reform etc.; and macroeconomic risk i.e. risk deriving from the macroeconomic or monetary factor.

1.1.2 Financial Performance

Financial performance as defined by (Investorwords, 2014) "is the level of performance of a business over a specified period of time, expressed in terms of overall profits and losses during that time. Evaluating the financial performance of a business allows decision-makers to judge the resultsofbusiness strategies and activities in objective monetary terms. Financial performance is a term used to refer to how well a firm utilises its resources to give returns to its investor's .It can be measured by the Return On Assets (ROA) or the Return On Capital Employed (ROCE)

Return on Assets **(**ROA) is also another major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net

income from all the resources of the institution (Khrawish, 2011). A higher ROA shows that the company is more efficient in using its resources.

ROA is expressed as a percentage and calculated as:

Return on Assets = Net Income/Average Total Assets

Return on Capital Employed (ROCE) also known as "return on net worth" (RONW) is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROCE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROCE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROCE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROCE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROCE the more effective the management in utilizing the shareholders capital.

Net income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock.) Shareholder's equity does not include preferred shares.

ROCE is expressed as a percentage and calculated as:
Return on Equity = Net Income/Shareholder's Equity

NBFIs 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 they incur in the due course. In other words for sustainable intermediation function, NBFIs need to be profitable. Beyond the intermediation function, the financial performance of non-banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussions on the economic growth.

Thus, financial performance analysis of Non-Bank Financial Institution has been of great interest to academic research since the Great Depression Intern the 1940's. In the last two decades studies have shown that NBFIs in Sub-Saharan Africa (SSA) are more profitable than the rest of the world with an average Return on Assets (ROA) of 2 percent (Flamini et al., 2009). One of the major reasons behind high return in the region was investment in risky ventures. The other possible reason for the high profitability in commercial banking business in SSA is the existence of huge gap between the demand for bank service and the supply thereof. That means, in SSA the number of banks are few compared to the demand for the services; as a result there is less competition and banks charge high interest rates. This is especially true in East Africa where the few government owned banks take the lion's share of the market.

In Kenya the Non-Bank Financial Institutions represents a small fraction in the financial sector. In a country where the financial sector is dominated by commercial banks, any failure in the sector has an immense implication on the economic growth of the country. This is due to the fact that any bankruptcy that could happen in the sector has a contagion effect that can lead to bank runs, crises and bring overall financial crisis and economic tribulations.

Despite the good overall financial performance of banks in Kenya, there are a couple of banks declaring losses (Oloo, 2011). Moreover, the current banking failures in the developed countries and the bailouts thereof motivated this study to evaluate the financial performance of banks in Kenya. Thus, to take precautionary and mitigating measures, there is dire need to understand the performance of banking sector and its determinants.

Most studies conducted in relation to bank and non-bank performances focused on sector-specific factors that affect the overall banking sector performances. Nevertheless, there is a need to include the macroeconomic variables. Thus, this study has incorporated key macroeconomic variables in the analysis. The determinants of non-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 profitability of non-banks. The overall financial performance of non-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 Non-Bank Financial Institution (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 Non-Bank Financial Institution. Yet, the effect of macroeconomic variables was not included.

1.1.3 Effects of Macroeconomic Variables on Financial Performance

According to Oliver (2000) macroeconomic variables are such factors that are pertinent to a broad economy at the regional or national level and affect a large population rather than a few select individuals. It is often argued that financial performance is determined by some fundamental macroeconomic variables such as the interest rate, gross domestic product (GDP), exchange rate, inflation and money supply which are closely monitored by the government, businesses and consumers. Anecdotal evidence from the financial press indicates that investors generally believe that monetary policy and macroeconomic events have a large influence on the volatility of financial performance,

Muchiri (2012) concluded in his study that the economic factors that impact on changing investment opportunities; the pricing policies; and factors which affect dividends theoretically, affect pricing and financial performance in aviation industry. As Muchiri (2012) revealed, is that prior studies argue that consumer prices index (CPI) is such a specific factor representing several macroeconomic variables such as discount rate, inflation and goods market (Nasseh and Strauss, 2000). A negative effect was found between CPI and stock prices. This can be explained as the results of higher risk of future profitability. An increase in prices level was

increase the cost of production which, in turn, would reduce future profitability. However, there are still some other opinions that higher prices level can also have a positive effect on stock prices due to the use of equities itself as equipment for hedging inflation. In this study, the researcher found that the macroeconomic variables selected in the study had both positive and negative correlation on the financial performance of the aviation industry.

Ehrhardt (1991) investigated if the interest rate has an explanatory power on stock return, and revealed that the interest rate can be used as an explanatory power for stock market return. Choi, Elyasiani and Kopecky (1992) did a study on the effects of interest rate and exchange rate on Turkish stock return and revealed that both macroeconomic variables have a significant impact on share prices. Evans (1998), argue that, the inflation risk and interest rate are integrated assets with higher risk accordingly investor should be compensated by receiving higher return which mean that there is a positive correlation between interest rate and inflation.

Ehrmahh and Fratscher (2004) investigate the effect on U.S monetary policy on stock prices with special focus on credit and interest rate for the period 1994-2003. This research concluded that the monetary policy has an effect on the stock prices but not the only determinant of stock price. The result of this research is not consistent with Modigliani and Chon (1978) who found out that the interest rate is one of the most significant determinate of stock prices. Afar et al. (2008), investigates the effects of interest rate volatility on stock returns and volatility using monthly returns of Karachi stock exchange and 90 days T-bill rate for the period of January 2002 to June 2006. Two distinct GARCH (1, 1) models have been implied, one without interest rates and second with the effects of interest rates. Results revealed that conditional market return has a negatively significant relation with interest rates whereas conditional variance of returns has a negative but insignificant relationship with interest rates. These results collectively depict that interest rates have strong positive predictive power for stock returns but weak predictive power for volatility.

1.1.4 Banking Industry in Kenya

Profit is the ultimate goal of Banks in Kenya of which even the NBFIs are not exempted. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that banking industry has no other goals. They could also have additional social and economic goals. However, the intention of this study is related to the first objective, profitability. To measure the financial performance of non-bank financial institution in Kenya there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003; Alexandru et al., 2008).

In 1980s, (NBFIS) grew rapidly in number, assets and liabilities. This growth mainly reflected some defects in the banking act such as: The minimum capital required to establish NBFIS was lower than needed by Commercial banks. Unlike banks, NBFIS were not required to maintain cash reserve ratio. NBFIs were permitted to impose higher lending rates on their facilities.S.

Banks were restricted from undertaking mortgaging lending. Banks would only lend the equivalent of 25% or less of their capital to any one single borrower.

The growth of non-banking institutions was a development that was so positive. Initially, they provided financial services that were specialized. This included hire purchase, leasing and merchant banking. The regulatory differences encouraged commercial banks to set up non-banking financial institutions to avoid the restrictions enforced on them and benefit from the higher interest rates. As a result, the restrictions between banks and NBFIs started to lessen with time, causing the causing the competition between them to increase. The increasing competition forced many of the NBFIs to become unusually aggressive. Some undertook risky lending and mismatched maturities whereby they accepted lower matches. The operation of non-banking financial institutions became unsustainable and contributed to the collapse of several institutions in mid 1980s and early 1990s. As a result, there was a flight of equality depository institutions as most depositors shifted funds from small NBFIs to larger and more established banks.

The Central Bank, on realizing that NBFIs were no longer complimenting activities of commercial banks, took the following measures It broadened the definition of money supply so as to include the deposits held at NBFIs. With effect from 1995 NBFIs were required to observe cash ratio requirements at stipulated levels. They were to do this by involving reserves at the Central Bank. It adopted the policy of universal banking in 1995. Since then, the central bank has encouraged NBFIs to convert into Commercial banks and merge where possible - cases where NBFIs are affiliated to Commercial banks. By August 2000, 25 conversions and 12 mergers had occurred.

1.2 Research Problem

Although several studies have been done in Kenya on the relationship between financial performances of banking industry as a result of the effects of macroeconomic variables, no study has focused on NBFIs which forms part of the banking industry other than banking and MFIs and this provided a new frontier for studying in the financial sector. For the purpose of this study we was concentrate with inflation, interest rate, exchange rate and the GDP which make up four major macroeconomic variables. This study was tend to concentrate on NBFIs in Kenya since it an area that has been largely ignored by the researchers. This study intends to fill a research gap by examining the effect of four major macroeconomic variables on the financial performance of non-bank financial institutions in Kenya.

For Instance Desaro (2012) undertook a study on the relationship between macroeconomic factors and the financial performance of commercial bank in Kenya. She established that the ROA was positively correlated with the GDP, money supply, lending rate and inflation, and negatively correlated with exchange rate. Njuguna (2013) did a study on the effects of macroeconomic factors on the financial performance of deposit taking microfinance institutions in Kenya and concluded that increase in GDP led to an increased performance while increase in lending rates led to a reduction in performance as measured by ROA.

The NBFIs play an important role in the economic development of Kenya. This is due to the ability of NBFIs to lend money to borrowers who miss out from being catered by the banking sector., although several studies have been done in Kenya on the relationship between financial performance of commercial banks and micro finance institutions as a result of the effects of macroeconomic variables, no one has done a study on NBFIs and this provided a new frontier for studying in the financial sector. The study intends to fill a research gap that has been left open as a result of so many studies being undertaken banking financial institutions in Kenya at the expense of NBFIs. Indeed NBFIs plays a very crucial role in financial mediation and hence this research intends to provide answer to the following question. How do macroeconomic variables affect the financial performance of NBFIs in Kenya?

1.3 Objective of the Study

i. To determine the effect of macroeconomic variables on the financial performance of the non-bank financial institutions sub-sector in Kenya.
ii. To establish the extent to which the selected macroeconomic variables impact the financial performance of the non-bank financial institutions sub-sector in Kenya.

1.4 Value of the Study

The findings of this study will be important to Non-Bank stakeholders, finance students', researchers' academicians and scholars, finance professionals, government agencies and policy makers.

The study will be useful to the non-bank shareholders as they will know whether treasury managers tasked with value addition of their investments are making viable decisions based on macroeconomic variables. The study will be of importance to management since they can tell the relationship between risk-adjusted returns and macroeconomic factors.

To academicians, scholars and researchers, this study will open up to a new area that has not been studied hence arouse curiosity in trying to dig deeper in this field especially for those who may be interested in conducting further research on this area will undoubtedly find this study to be significant point of reference for literature and research gaps.

Government agencies such as CBK, KRA and policy makers this will offer an useful basis that can guide them in decision making process especially when formulating policies such as fixing the interest rates and legislations that govern the NBFIs operations in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature review is any research study done by other researchers, scholars and academicians which provides the scholarly background needed for the subject under study. The main aim of literature review is to determine what has been done already related to the research problem being studied. A detailed knowledge of what has been done helps the researcher to: avoid unnecessary and unintentional duplication; form the framework within which the research findings are to be interpreted; and demonstrate his or her familiarity with the existing body of knowledge (Emory, 1985). This chapter begins by addressing the theories guiding this study, it then goes ahead to discuss macroeconomic variables influencing the financial performance of NBFIs .It will adopt the theoretical review and empirical review

2.1 Theoretical Review

In determining the effect of macroeconomic variables on the financial performance of non-bank financial institutions in Kenya, this study combines: Modern portfolio theory, efficient market hypothesis theory, pecking order theory and arbitrage pricing theory.

2.2.1Modern Portfolio Theory

Modern Portfolio Theory (MPT) is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. There are four basic steps involved in portfolio construction: Security valuation, Asset allocation, Portfolio optimization and Performance measurement.

More technically, MPT models an asset return as a normally distributed function (or more generally as an elliptically distributed random variable), define risk as the standard deviation

of return, and models a portfolio as a weighted combination of assets, so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not perfectly positively correlated, MPT seeks to reduce the total variance of the portfolio return. MPT also assumes that investors are rational and markets are efficient.

MPT or portfolio theory was introduced by Markowitz (1952) with his paper "Portfolio Selection," which appeared in the 1952 Journal of Finance. Thirty-eight years later, he shared a Nobel Prize in Economics in 1990 with Merton Miller and William Sharpe for what has become a broad theory for portfolio selection and their contribution to the field of financial economics. Prior to Markowitz's work, investors focused on assessing the risks and rewards of individual securities in constructing their portfolios. Standard investment advice was to identify those securities that offered the best opportunities for gain with the least risk and then construct a portfolio from these. Following this advice, an investor might conclude that railroad stocks all offered good risk-reward characteristics and compile a portfolio entirely from these. Intuitively, this would be foolish. Markowitz formalized this intuition. Detailing mathematics of diversification, he proposed that investors focus on selecting portfolios based on those portfolios' overall risk-reward characteristics instead of merely compiling portfolios from securities that each individually has attractive risk-reward characteristics. In a nutshell, inventors should select portfolios not individual securities.

If we treat single-period returns for various securities as random variables, we can assign them expected values, standard deviations and correlations. Based on these, we can calculate the expected return and volatility of any portfolio constructed with those securities. We may treat volatility and expected return as proxy's for risk and reward. Out of the entire universe of possible portfolios, certain ones will optimally balance risk and reward. These comprise what Markowitz called an efficient frontier of portfolios. An investor should select a portfolio that lies on the efficient frontier.

James Tobin (1958) expanded on Markowitz's work by adding a risk-free asset to the analysis. This made it possible to leverage or deleverage portfolios on the efficient frontier.

This lead to the notions of a super-efficient portfolio and the capital market line. Through leverage, portfolios on the capital market line are able to outperform portfolio on the efficient frontier. Sharpe (1964) formalized the capital asset pricing model (CAPM). This makes strong assumptions that lead to interesting conclusions. Not only does the market portfolio sit on the efficient frontier, but it is actually Tobin's super-efficient portfolio. According to CAPM, all investors should hold the market portfolio, leveraged or de-leveraged with positions in the risk-free asset. CAPM also introduced beta and relates an asset's expected return to its beta.

Portfolio theory provides a context for understanding the interactions of systematic risk and reward. It has shaped how institutional portfolios are managed and motivated the use of passive investment techniques. The mathematics of portfolio theory is used in financial risk management and was a theoretical precursor for today's value-at-risk measures. (Risk Encyclopedia-2014)

2.2.2 Efficient Market Hypothesis Theory

A market theory that was developed by Fama (1970), the Efficient Market Hypothesis (EMH) states that at any given time and in a liquid market, security prices fully reflect all available information. The EMH exists in various degrees: weak, semi-strong and strong, which addresses the inclusion of non-public information in market prices. This theory contends that since markets are efficient and current prices reflect all information, attempts to outperform the market are essentially a game of chance rather than one of skill.

The weak form of EMH assumes that current stock prices fully reflect all currently available security market information. It contends that past price and volume data have no relationship with the future direction of security prices. It concludes that excess returns cannot be achieved using technical analysis.

The semi-strong form of EMH assumes that current stock prices adjust rapidly to the release of all new public information. It contends that security prices have factored in available market and non-market public information. It concludes that excess returns cannot be achieved using fundamental analysis.

The strong form of EMH assumes that current stock prices fully reflect all public and private information. It contends that market, non-market and inside information is all factored into security prices and that no one has monopolistic access to relevant information. It assumes a perfect market and concludes that excess returns are impossible to achieve consistently.(Morning Star-2014)

An investment theory that states it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

Although it is a cornerstone of modern financial theory, the EMH is highly controversial and often disputed. Believers argue it is pointless to search for undervalued stocks or to try to predict trends in the market through either fundamental or technical analysis.

Meanwhile, while academics point to a large body of evidence in support of EMH, an equal amount of dissension also exists. For example, investors, such as Warren Buffett have consistently beaten the market over long periods of time, which by definition is impossible according to the EMH. Detractors of the EMH also point to events, such as the 1987 stock market crash when the Dow Jones Industrial Average (DJIA) fell by over 20% in a single day, as evidence that stock prices can seriously deviate from their fair values.

2.2.3 Arbitrage Pricing Theory

Arbitrage pricing theory (APT) is a general theory that entails analysis of macroeconomic variables and asset pricing that holds that the expected return of a financial asset can be modelled as a linear function of various macro-economic factors or theoretical market indices, where sensitivity to changes in each factor is represented by a factor-specific beta coefficient. The model-derived rate of return will then be used to price the asset correctly - the asset price should equal the expected end of period price discounted at the rate implied by the model. If the price diverges, arbitrage should bring it back into line. The theory was

proposed by the economist Ross (1976). The APT was a revolutionary model because it allows the user to adapt the model to the security being analyzed. And as with other pricing models, it helps the user decide whether a security is undervalued or overvalued and so he or she can profit from this information. APT is also very useful for building portfolios because it allows managers to test whether their portfolios are exposed to certain macroeconomic variables.

APT may be more customizable than CAPM, but it is also more difficult to apply because determining which factors influence a stock or portfolio takes a considerable amount of research. It can be virtually impossible to detect every influential factor much less determine how sensitive the security is to a particular factor. But getting "close enough" is often good enough; in fact studies find that four or five factors will usually explain most of a security's return: surprises in inflation, GNP, investor confidence and shifts in the yield curve.

2.2.4 Pecking Order Theory

Pecking order theory starts with asymmetric information as asset managers in non-bank financial institution know more about their company's prospects, risks and value than outside investors. This is an important theory that guides asset managers on assets and portfolio management in regards to risk-return tradeoffs. Asymmetric information affects the choice between internal and external financing and between the issue of debt or equity. There therefore exists a pecking order for the financing of new projects.

Traditional theories of intermediation are based on transaction costs and asymmetric information. They are designed to account for institutions which take deposits or issue insurance policies and channel funds to firms. They are built on the models of resource allocation based on perfect and complete markets by suggesting that it is frictions such as transaction costs and asymmetric information that are important in understanding intermediation (Allen and Santomero, 1997).

Asymmetric information favors the issue of debt over equity as the issue of debt signals the board's confidence that an investment is profitable and that the current stock price is undervalued (were stock price over-valued, the issue of equity would be favoured). The

issue of equity would signal a lack of confidence in the board and that they feel the share price is over-valued. An issue of equity would therefore lead to a drop in share price. This does not however apply to high-tech industries where the issue of equity is preferable due to the high cost of debt issue as assets are intangible.

2.3 Determinants of Financial Performance of NBFIs

The determinants of bank performances can be classified into bank specific (internal) and macroeconomic (external) factors (Al-Tamimi, 2010; Aburime, 2005).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 profitability of banks.

Financial performance of NBFIs can be determined by the total asset, term deposit, operating revenue and operating expense Total asset is considered as one of the most prominent yardstick of financial stability measurement of financial institutions by investors. Stakeholders generally perceive the financial institutions to be superior over the others if it total asset is higher than other institutions. When an NBFI has huge Operating Revenue and Total Equity the investors feel more secured and approach to this NBFI for their investment. As the number of customers increases it results in more profitable organization. Again we see operating revenue is the another variable which has a major impact on net profit. So it is undoubtedly true that if the revenue increases, ultimately it has a positive effect over the profitability.

2.4 Empirical Review

Financial times (2000) present comparative data for 60 large pool schemes in Kenya, Europe and USA. The data revealed that in Kenya, 50.2% of the fund is invested in real estate compared to 7.0% in Europe. Equity only formed 11.8% of the fund in Kenya compared to 34.2% and 53.1% in Europe and USA respectively. Bonds and bills took up 16.3% of the Kenyan fund while they took up 12.6% and 22.7% of the European and American funds respectively. Offshore investments only formed 5.5% of the Kenyan fund compared to 26.5% and 11.1% of the European and USA funds respectively. The treasury managers have

a good reason for making such investment decision. The different proportions in the different countries could be due to the different factors in these countries.

This paper contributes to the existing literature in the following ways. It is the first to empirically assess the investment value of analyst recommendations using the calendar-time approach for the Kenya stock market. A second novel contribution is the application of the Black-Litterman asset allocation model to analyst recommendation data, and the evaluation of its performance in calendar-time. Thirdly, we extend prior calendar-time studies such as Barber, Lehavy, McNichols, and Trueman (2001) by accounting for transaction costs in a more precise way and through the examination of the effect of infrequent portfolio rebalancing and filtration of dated recommendations. This study should be of interest to academics and practitioners alike. From an academic perspective, we assess the economic impact of analysts' recommendations using a realistic active-management model. This study tests conjointly the ability of analysts as a cohort to provide forecasts for clients, as well as the efficiency of the market. Assessing the investment value of analyst recommendations is an ideal way to test whether it is possible to profit abnormally using publicly available information (as opposed to studies on corporate events), because security analyses are carried out with the explicit purpose of improving investment performance (Barber, Lehavy, McNichols, and Trueman, 2001). From the practitioner's perspective, we assess the performance of a realistic trading strategy developed on the basis of analysts' recommendations. We also discuss potential issues in operationalising the Black-Litterman model when incorporating the information contained in these recommendations. Finally, brokers issuing the recommendations have a vested interest because they spend large amounts of resources to produce them with the intention of generating commissions.

An important issue for empirical research the time period for which a recommendation remains intact. Many analysts issue reiterations of existing recommendations if they believe that their information regarding the stock has not been incorporated into the prevailing price. Unlike with earnings forecasts, which are generally revised on a monthly basis, there is no set frequency with which recommendations are typically reiterated or changed. According to Green (2006), a plausible explanation for why trading strategies consisting of consensus recommendations perform poorly in some prior studies is because some recommendations

from which the consensus is formed can be fairly stale. We apply an arbitrary 103-day cutoff on stale recommendations which is the median interval between the updating of analyst recommendations. Barber, Lehavy, McNichols, and Trueman (2001) and Boni and Womack (2006) show that the majority of the value in recommendations is attained from the post-recommendation price drift, which lasts for only a few months. Therefore, we examine the impact of using, as part of a consensus, stock recommendations that have been initiated, reiterated, or revised less than 103 days earlier. It is arguable that we should not use stocks with longer-term recommendations in the portfolio, as stale and dated recommendations may dilute the quality of the consensus. Consistent with Barber, Lehavy, McNichols, and Trueman (2001), we take the simple average of outstanding recommendations in calculating the consensus recommendation used in the portfolio constructions. Elton, Gruber and Grossman (1986) finds consensus analyst recommendations outperform individual analyst recommendations in their predictive ability. Clemen's (1989) review of forecasting literature shows that simple averages of forecasts are the most robust.

According to our Raul and Rahman (2009), their study was clear that the selected profitability determinants have impact upon net profit, The results of multiple regressions suggest that the selected independent variables explain more than 98.30% changes in the net profit. By analyzing the other statistical results of multiple regressions we found that the results are very much consistent with the simple regression. All the results are statistically significant and overall provide an idea that liquidity is the basic determinant of profitability in NBFI sector. So it can be inferred that this promising and potential sector in Bangladesh can flourish very fast and enhance profitability by improving total equity and operating efficiency. To make the findings easier to understand, summary of the analysis is given below: There were 7 variables. 6 were independent and 1 was dependent. In total, 16 quarterly data of each variable was taken for analysis. Almost all the independent variables have strong positive relation with the dependent variable. Among all variables has positive impact on net profit except term deposit and operating expense. The findings of the paper cannot be taken as conclusion and it will be wrong to end here with such a result. Because this study gives a simple picture and leaves room for further study in different areas of NBFI functions such as products of productivity analysis, Data Envelopment Analysis (DEA), CAMELS rating, robust estimation approach based on the competing efficient structure (ES)

hypothesis, effect of commercial property price movements, use of statistical tools and more. The impact of government policy in the performance of NBFI is also not studied in this study which must have significant impact on the performance of NBFI. Further study also can be concluded on post and performs of NBFI sector. However, the study provides managers with understanding of activities that would improve their NBFI‟s financial performance.

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There are various studies that have been undertaken Kenya on the relationship of macroeconomic variables and financial performance and their findings variables are diverse; Kipngetich (2011) did a study on the relationship between interest rates and financial performance of commercial banks in Kenya and found that there is a positive relationship between interest rates and financial performances of commercial banks. Thus companies should therefore prudently manage their interest rates to improve their financial performance. Interest rate was found to have negative relationship with the profitability of companies in aviation industry.

Desaro (2012) did a study in the study on the effect of macroeconomic variables on financial performance of commercial banks in Kenya and found out that the ROA was negatively correlated with the exchange rate and positively correlated with the GDP growth and inflation. Other empirical studies reviews include Kipngetich (2011) and Muchiri (2012).

According to Njuguna (2013) who undertook a study on the relationship between macroeconomic factors and MFIs financial performance measured by ROA ,the study concluded that ROA is highly a function of macroeconomic factors and more specifically GDP, Interest rates and Inflation and the three variables can be credibly used to predict MFIs expected ROA. This revelation offers regulators and those responsible over macroeconomic variables, vital information that if MFIs are to operate profitably and encourage growth in the sector, then; they have to offer favourable economic variables. That is, they should ensure high economic growth (GDP) and have low inflation and interest rates in the economy which will instead boost MFIs performance and therefore creating room for higher economic growth.

Mwangi (2013) undertook a research in non-financial sector where the study was on the relationship that exists between macroeconomic variables and financial performance of aviation industry in Kenya. The study concluded that the macroeconomic variables influenced the financial performance of companies in the aviation industry in Kenya at 20%, level of significance (5%) The study also concluded that ROA has a weak positive insignificant correlation with GDP .It further conclude that there is a weak negative insignificant correlation between ROA and real exchange rate, annual average lending rate and annual inflation rate.

2.5 Summary of the Literature Review

In recent years, Non-Bank Finance Institution has become an area of interesting discussions by scholars, researchers' policy makers and financial planners about their role in stimulating economic development through provision of banking services and resources for investment purposes to large proportion of the population that had been neglected for long by the commercial banks in Kenya. According to KNBS Economic Survey 2013 Highlights). ,the overall domestic credit grew by 20 per cent to Ksh 1.8 trillion in 2012 up from Ksh 1.5 trillion in 2011.Thiscan be partly attributed to the fact that majority of the Kenyan population live below the poverty line and hence cannot afford to operate a bank accounts which locks them out from accessing banking services but NBFIs have come up and bridged up this gap by coming up with innovative products which do operate under stringent terms such as mshwari and agency banking that are specifically suited for this population by providing banking services at a cheaper cost and conveniently. This plays a very vital role in transfer and reallocation of resources.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter discusses the methodology that will be used in gathering data, processing the data and translating the collected data into meaningful information. The process of researching for the study will be primarily exploratory as it sought to find out if the Macroeconomics variables have an effect on NBFIs financial performance. It encompassed the research design that takes into consideration aspects like the size of sample, the variables under the study, the approaches to the research, and the methods employed in data collection.

3.2 Research Design

The study employed the descriptive combined with a correlation research design. Descriptive survey design was be used since the data obtained on the sampled elements and the variables were for a given time. Correlation method and regression method was used to determine the relationship between macroeconomics variables (the independent variables) and NBFIs financial performances (the dependent variable).The target population for this study as at 31st December 2013, the non-bank financial institutions sub-sector as per Central Bank of Kenya, the regulatory authority comprised of the 94 forex bureaus 9 MFIs, 2 CRBs and 7 MRPs .The sample population for this study involved all the 112 NBFIs in Kenya between the period of December 2004 and December2013.

3.3 Population

The population for this study 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) and 112 NBFIs in Kenya between the period of December 2004 and December2013 comprising of 94 Forex , 9 MFIs, 2 Credit Reference

Bureaus and 7 Money Remittance Bureaus encompasses the NBFIs in Kenya. This study was consider the 112 NBFIs in Kenya which comprises of the entire population.

3.4 Data Analysis

The study analysed the data collected using the descriptive, correlation and regression analysis. This model of analysis examined the simultaneous effects of the independent variables on a dependent variable. In the study, the yearly data was collected from Central Bank of Kenya and Kenya National Bureau of Statistics.

Inflation (INF), interest rates (IR), exchange rates (ER) and gross domestic product growth (GDP) was used as independent variables. Single variable for financial performance was used to measure performance of NBFIs. To measure financial performance for the period between 2004 and 2013 of NBFIs, Return on Asset (ROA) was used. This variable is relevant for two main reasons. First, it represents the financial performance of an institution and second, it's coordinated chronologically with GDP growth, interest rates and inflation.
The Statistical Package for Social Sciences (SPSS version 7) was used to analyse the above data.

3.4.1Analytical Model

An Ordinary Least-squares Regression model was used to measure the effect of changes in the domestic economy on the financial performance of NBFIs with only one dependent variable as opposed to the three used by Hermanto and Astute (2013) .
The model to be used for this study is:

$$Y = X + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where:

Y is the dependent variables of average financial performance of NBFIs at time t, i.e. ROA measured as a percentage of the total assets of the firm.

β**0** is the regression coefficient

$\beta_1 X_1$ is the average quarterly inflation rate.

$\beta_2 X_2$ is the average quarterly exchange interest rate charged by lenders.

$\beta_3 X_3$ is the average quarterly exchange rate between USD and Ksh.

$\beta_4 X_4$ is the average quarterly for GDP growth rate.

3.4.2 Test of Significance

The error term was to represent all the other variables other than the ones under study that affect the financial performance of NBFIs in Kenya. To test whether the difference in means is statistically significant we performed analysis of variance (ANOVA) using the R function aov (). The level of significance was 5%.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

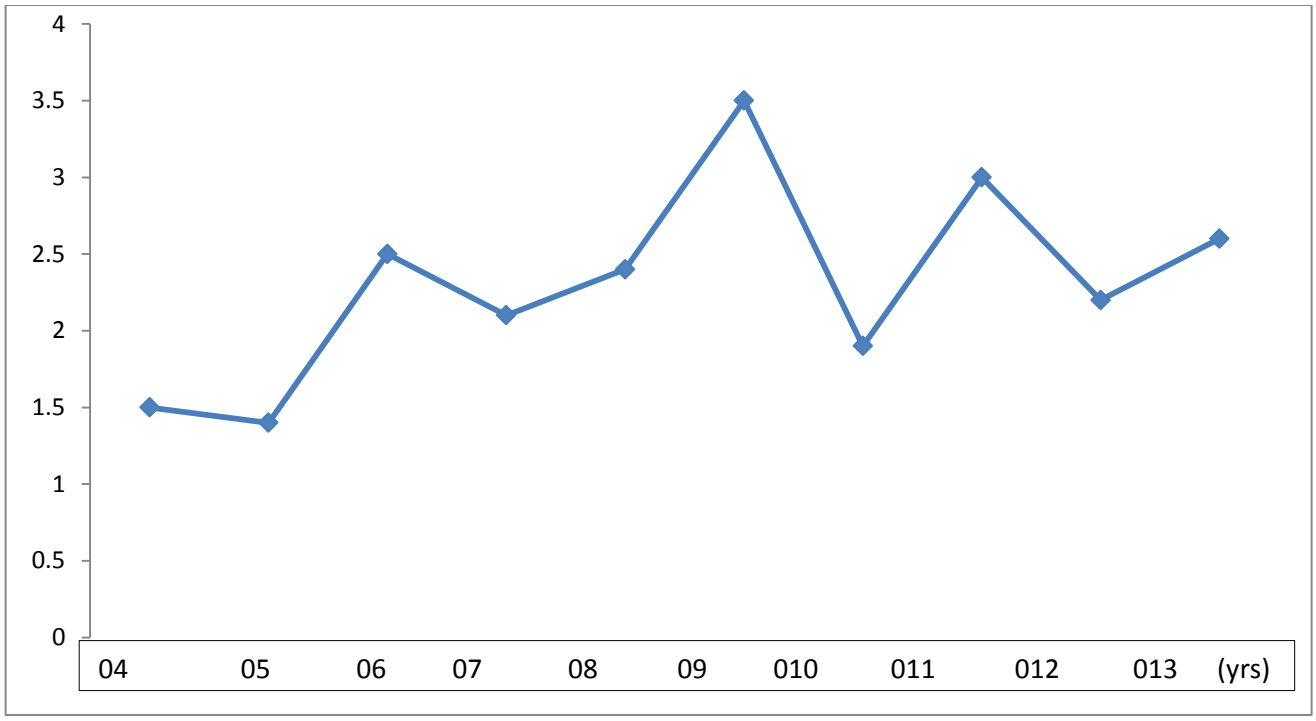
4.1 Introduction

This chapter presents the data analysis, findings, interpretations and presentation of the study based on the research objective which was to determine the effect of macroeconomic variables on financial performance of NBFIs in Kenya. The analysis is based on data collected from 2004 to 2013 on a quarterly basis. The results are presented in the form of summary tables. The data for this study was obtained from Central Bank of Kenya and Kenya National Bureau of Statistics. The data was analysed using descriptive analysis, correlation analysis and multiple linear regressions to answer the research objective using SPSS.

4.2 Descriptive Analysis

The figure above exhibits the performance of non–financial institution in Kenya with regard to profitability measured as returns on assets over the last to ten years. The graph demonstrates that financial performance in Kenya has been tremendous. Indeed one could realize that 2009 and 2010, there was drop in performance of the non-financial institutions from the graph, one can easily notice that despite decrease in profits of about 5% between 2010 and 2012, there was still positive ROA. And perhaps a decrease in profitability was not due to poor management but it was due to inflation. Further the graph indicates that non-financial institutions in Kenya recorded an average of about 7 per cent between 2010 and 2012 which is impressive. Well-developed financial institutions and markets foster economic development by improving the allocation of society's scarce resources rather than by facilitating faster capital accumulation or increased savings (Beck, Levine and Loayza, 2000). A well-developed financial system widens access to external finance and channels resources to the sectors that need them most (Wurgler, 2000). According to Beck (2002) and Raddatz, (2003), effective financial institutions and markets can help economies cope better with exogenous shocks such as terms of trade volatility and move them away from natural resource based development

Figure4.1 Performance of non-bank institution in Kenya



Source: Research Findings

In the figure, in the x-axis 1 represents 2004 and 10 represents 2013 as the study focused on 10 years on quarterly basis to examine financial performance of non-bank institutions in Kenya.

Table4.1 Descriptive Statistics

	Mean	Std. Deviation	N
ROA	2.31	.618	40
Inflation Rate	9.13	5.014	40
AQER	.05	1.088	40
AQITR	14.96	2.049	40
QGDPGR	1.43	1.802	40

Source: Research findings

Where:

AQER –Average Quarterly Exchange Rate

AQITR –Annual Quarterly Interest Rate

QGDPGR –Quarterly Gross Domestic Product Growth Rate

4.2 Inferential statistics

In examining the relationship between macroeconomic variables on the financial performance of non-bank institutions, the strength of the model was measured through ANOVA using significance of F-statistics at 5% significance level and a coefficient of determination (R2). As shown by the following tables, the variables in the model used were measured.

4.2.1 Regression Analysis

The effect of macroeconomic variables on the financial performance of non-bank financial institutions was analysed using multiple linear regressions. Results in this study indicate a slight different of performance from Mwangi (2013) study on macroeconomic on financial performance in the aviation sector whose explaining power produced 20.

Table 4.2 shows the results.

$Y= X+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4$

$Y=1.399+0.103\ X_1+0.382X_2+0.169\ X_3+0.45X_4$

Table4.2 Regression results for the dependent and independent variables

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.399	.700		1.999	.053
	AQIFR	.013	.019	.103	.655	.517
	AQER	.217	.087	.382	2.504	.017
	AQITR	.051	.046	.169	1.107	.276
	QGDP	.015	.054	.045	.284	.778

a. Dependent Variable: ROA

Source: Research Findings

4.2.2 Model Summary

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458[a]	.210	.119	.580

a. Predictors: (Constant), QGDPGR, AQER, AQITR, Inflation Rate

Source: Research findings

Table 4.3 shows the regression results of credit card overdue amount. Firstly, Panel A is the ANOVA analysis of the regression model. The regression model shows good fitness, reaching a significant level (F-statistic = 2.320, p value = 0.076), and R2 = 0.210, Adj. R2 = 0.119.From the value of r2 we can say that all these 4 predictor variables combined explain

21% of the variance in ROA. The P- Value (2.320) of F - tests at 95% confidence level states that the result is not significant as it is more than 0.05.

As shown in table 4.3 below, results indicates F-statistics is 2.320 and it can be interpreted to mean that it is significant at 0.76. Therefore it can be stated that independent variable influences ROA at 76 per cent and hence the model is considered well to the actual data.

Table 4.4 ANOVA Model Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.126	4	.781	2.320	.076[a]
	Residual	11.790	35	.337		
	Total	14.916	39			

a. Predictors: (Constant), QGDP, AQER, AQITR, AQIFR

b. Dependent Variable: ROA

Source: Research Findings

4.2.4 Regression results for the dependent and independent variables

Results from this study shows that when all the variables are placed at a constant zero, ROA will be positive 13.99 per cent. Table 4.4 shows that there is weak positive relationship between ROA and inflation rate of 0.103 and this means as inflation rises at 1%, ROA increases by 0.103 per cent. In addition, the study found a strong positive relationship between currency exchange growth rate and ROA of 0.382 which translates to mean at 5 % level of significance and 95% confidence level, ROA was significant at 38.2 per cent.

In order to establish performance of non-bank Institutions, the estimation of coefficients has been done. A model comprising several factors was estimated and table 3 below shows that since the calculated significance value is above (0.05), it is an indication that the regression model are not significant in explaining financial performance of non-bank institution.

Table4.5 Correlations results for the dependents and independent variables

n=40

		ROA
Pearson Correlation	ROA	1.000
	AQIFR	.136
	AQER	.409
	AQITR	.212
	QGDPGR	.083
Sig. (1-tailed)	ROA	-.
	AQIFR	.202
	AQER	.004
	AQITR	.094
	QGDPGR	.305

Source: Research findings

4.3 Interpretation of the Findings

Residual standard error: 11.790 on 35 degrees of freedom Multiple R-squared: 0.210, Adjusted R-squared: 0.119 F-statistic: 2.320 on 4 and 35 DF, p-value: 0.76. All of the information in the ANOVA table is here. The F-statistic, degrees of freedom, and p-value are on the last line. The residual standard error is the square root of the Mean Sq Residuals (or error mean square), and the rest can be calculated from those sums. The findings suggest that all the variables have a positive relationship with ROA and differ in their strength of determination in the model.

In this study, five variables were tested against ROA and these include inflation rate, currency exchange growth rate, average quarterly interest rate and quarterly GDP growth rate. The results shows currency exchange growth rate has a stronger positive relationship

then the other variables, for example, quarterly GDP growth rate had a weak positive relationship of 0.45. These variables equally showed favourable and positive effects on the ROA and based on the results, it can be said a company is better at converting its investment into profit. When they really think about it, management's most important job is to make wise choices in allocating its resources.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In chapter four, the study has discussed results from the study and this chapter examined the summary of findings, conclusions and recommendations. This has been discussed in the following sections.

5.2 Summary

In the discussion of the result of the estimated model for the financial performance of non-bank institutions the researcher has concentrated on all variables. Table 5 shows that all the macroeconomic variables are significant to be considered as the drivers in the financial performance of non-bank institutions. The result shows that AQER (Currency Exchange Growth Rate) had strong positive relationship with ROA. This is in line with the priori expectation and since it is significant in the major driver therefore, it non-bank institutions. This outcome is in line with work done by Kipngetich (291) on relationship between interest rates and financial performance of commercial banls in which he found a positive relationship. In a similar study done by Karlrask and Ameyah (2010), revealed that equity ratio which determines, capital strength of commercial banks has positive relationship ROA and AQER is in line with the finding of Berger 1995 and Suffian el al, 2008.

The QGDP (Quarterly Gross Domestic Product) hard a weak positive relationship with ROA. Although this variable produced weak positive results, it has a significant impact on the financial of non-bank institutions in Kenya. The result is in line with Desaro (2012) who found that RAO is positively correlated with the GDP growth. The general consensus is that 2.5-3.5% per year growth in real GDP is the range of best overall benefit; enough to provide for corporate profit and jobs growth yet moderate enough to not incite undue inflationary concerns.

The average quarterly interest rate (AQITR) A measure of price by a borrower for the use of funds saved by the tender and compensation to the tender for his deferring expenditure has a weak positive relationship with ROA. In addition, it is statistically significant to be considered as a financial performance driver. However while central bank interventions have largely succeeded in keeping interest rate low; there has been doubt about its ability to stimulate borrowing (Meaning and Zhu, 2011). At this point, it can be stated that divergent trends in leading rates most likely are a challenge in the performance of the non-bank institutions, To this end, it is worth mention that results from the study shows that smaller non-bank institutions enjoys economics of scale and hence performed well.

5.3 Conclusion

The study has examined the effect of macroeconomic variables on non-bank institution Kenya. The study concludes that there is difference in effects of the variables and according to the result only currency exchange growth rate has strong positive relationship with ROA. Interestingly, the results show that the performance of non-bank institutions was affected by a variety of macroeconomics variables. With regard to be the selected period, the findings of this study indicate non-bank institutions were performing badly at the mid-years.

The results of multiple regressions suggest that the selected independent variables explain more than 21% changes in the net profit. By analysing the other statistical results of multiple regressions we found that the results are very much consistent with the simple regression. All the results are statistically significant and overall provide an idea that liquidity is the basic determinant of profitability in NBFI sector. So it can be inferred that this promising and potential sector in Kenya can flourish very fast and enhance profitability by improving its liquidity position and operating efficiency

5.4 Recommendations for Policy Makers

The study recommends that there is an urgent need for policy makers to create an awareness on the role played by the NBFIs in the economy of Kenya and massive financial opportunities available in the NBFI sub-sector which is still not yet fully exploited by providing tax and financial incentives to encourage the establishment and development of NBFIs especially in rural areas .

The study recommends the that there is a need for the government to control the interest rates charged by the banking sector to encourage investments and also use it as monetary tool to regulate the inflation rate which is positively correlated with the financial performance of NBFIs when measured using ROA.

5.5 Limitations of the Study

This study is based on a test on four independent variables namely inflation, interest rate ,GDP and exchange rate whereas there are other macroeconomic variables that affect ROA such as money supply.

The study only relied on ROA as a measure of financial performance whereas there are other parameters that can be used to measure financial performance such as Return on Capital Employed(ROCE).

This study relied secondary data that which proved to be a challenge in proving the accuracy of the data unlike in primary data where the researcher collects the data and therefore being guaranteed of its accuracy.

5.6 Areas for further Research

This study is based on data for 10 year, so data from this and other published sources may be insufficient to make a solid conclusion. Hence, further studies should be undertaken to expand the period under study thus increasing the sample data and reliability of the conclusion. .

The study focused only on the NBFI sub-sector of the banking sector which provides a conclusion that may not be the same with the rest of the banking sub-sectors hence this provides new areas for further research where the banking sector will be considered in totality including the CBK, commercial banks and NBFIs,

Lastly the study can be conducted to other sectors of the economy to see whether the macroeconomic factors have the same effect on their financial performance as in the case of the NBFIs.

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APPENDIX I: List of Licensed of Non-Bank Financial Institutions as at December 2013

No	Name of Bureau	Physical Address	Date of issue of License	E-mail Address & Fax
1	Alpha Forex Bureau Ltd P. O. Box 476 – 00606 Nairobi Tel: 4451435/7	Pamstech House Woodvale Grove Westlands	11th January 2003	Alpha-forex@yahoo.com Fax: 254-2-4451436
2	Amana Forex Bureau Ltd P. O. Box 68578 – 00622 Nairobi Tel: 6761296	Eastleigh, Sect.VIII, 1st Ave. Nairobi	1st November 2003	Amanaexpress236@hotmail.com Fax: 254-2-6760137
3	Arcade Forex Bureau Ltd P. O. Box 21646 – 00505 Nairobi Tel: 3871946/2189121/0721-810274	Adams Arcade Ngong Road	1st November 2003	Fax: 254-2-571924
4	Aristocrats Forex Bureau Ltd P. O. Box 10884 – 00400 Nairobi Tel: 245247/228080	Kenindia House Nairobi	1st January 1995	aristoforex@nbi.ispkenya.com Fax: 254-2-213794
5	Avenue Forex Bureau Ltd P. O. Box 1755 – 80100 Mombasa	Motor Mart Building, Moi Avenue, Mombasa	29th September 2008	
6	Bakaal Express Forex Bureau Ltd P. O. Box 71248 - 00622 Nairobi Tel:		24th November 2009	
7	Bamburi Forex Bureau	Nyali	1st	bamburiforex@hotmail.com

	Ltd P. O. Box 97803 Mombasa Tel: 041-5486950, 0722-412649/ 0733-466729	Mombasa	November 2003	Fax: 254-41-5486948
8	Bay Forex Bureau Ltd P. O. Box 42909 – 00100 Nairobi Tel: 2244186/ 2248289/2244188	The Stanley Bldg. Kenyatta Avenue Nairobi	16th August 1995	info@bayforexbureau.com Fax: 254-2-229665/248676
9	Boston Forex Bureau Limited P.O. Box 11076–00400 Nairobi Tel: 0205249664/ 0732622429/ 0702022429	Nakumatt Ukay Westlands	26th May 2014	marioshah_101@hotmail.com
10	Cashline Forex Bureau Ltd P. O. Box 64672 – 00619 Nairobi Tel: 4452296/97/98	Sound Plaza Westlands	1st October 2004	cash@cashlinefx.co.ke Fax: 254-20-4452299
11	CBD Forex Bureau Limited P. O. Box 10964 – 00400 Nairobi Tel: 316123	Clyde House, Kimathi Street	24th November 2009	Fax: 254-2-318895
12	Central Forex Bureau Ltd P. O. Box 43966 – 00100 Nairobi Tel: 2226777/ 2224729/317217	I. P. S. Building, Ground Floor, Kaunda Street, Nairobi	1st September 1995	centralforex@swiftkenya.com Fax: 254-2-249016
13	City Centre Forex Bureau Ltd P. O. Box 40253 – 00100 Nairobi Tel: 2246694/0729-888555	Nginyo Towers, Ground Floor, Koinange Street Nairobi	1st September 2004	info@citycentreforex.co.ke Fax No: 254-02-246696

14	Classic Forex Bureau Limited P. O. Box 39166 – 00623 Nairobi Tel: 3862343/4	Prestige Plaza, 1st Floor, Ngong Rd Nairobi	25th July 2008	Fax No. 3862346
15	Commercial Forex Bureau Limited P. O. Box 47452 – 00100 Nairobi Tel. 020-2210307/8	Vedic House, Mama Ngina Street	16th May 2008	info@commercialforex.co.ke
16	Conference Forex Bureau Limited P. O. Box 32268 – 00600 Nairobi Tel. 3581293, 020-3586802	KICC, Ground Floor	30th January 2008	
17	Continental Forex Bureau Ltd P. O. Box 49580 – 00400 Nairobi Tel: 2222140, 3168025	Old Mutual Building Kimathi Street Nairobi	21st July 1995	cfbbusiness@yahoo.com Fax: 254 2-216163
18	Cosmos Forex Bureau Ltd P. O. Box 10284 – 00100 Nairobi Tel: 250582/5	Rehema House Nairobi	1st September 1995	Fax: 254-2-250591
19	Crater Forex Bureau Ltd P.O. Box 130 -20100 Nakuru Tel: 051- 2214183, 2216524	Menengai Motors George Morara Avenue	1st September 1995	craterforex@wananchi.com Fax: 254-51-2214183
20	Crossroads Forex Bureau Limited P. O. Box 871 – 00502 Nairobi, Tel: 0729-888444	Crossroads Shopping Centre, Karen, Nairobi	12th May 2008	info@crossroadsforex.co.ke
21	Crown Bureau De Change Ltd P. O. Box 22515–	Corner House, Mama	6th June 1995	info@crown.co.ke Fax: 254-2-252365

	00400 Nairobi Tel: 2250720/1/2	Ngina Street Nairobi		
22	Dalmar Exchange Bureau Ltd P. O. Box 16381-00610 Nairobi Tel:+254-20-6761628,6760476 6762301	2nd Floor, Olympic Complex Centre 1st Ave. 7th street, Eastleigh Nairobi	15th December 2003	dalmarforex@gmail.com Fax:+254-20-6760470
23	Downtown Cambio Forex Bureau Ltd P. O. Box 42444 – 00100 Nairobi Tel: 608659; 609547/607721	Wison Airport Nairobi	2nd Novembe r 1995	Fax: 254-2-608354
24	Forex Bureau Afro Ltd P. O. Box 14353 – 00800 Nairobi Tel: 2247041/2250676/22295 0	Jamia Plaza Kigali Street Nairobi	17th February 1998	Fax: 254-2-2251078
25	Gala Forex Bureau Ltd P. O. Box 35021-00100 Nairobi Tel: 020310241 Mobile: 0729750000	20th Century 1st Floor Mama Ngina/ Kaunda Street	15th December 2003	galaforexbureau@gmail.co m Fax: 020310261
26	Gateway Forex Bureau Ltd P. O. Box 11500 – 00100 Nairobi Tel: 2212955/45/49, 0700-003435	Town House, Kaunda Street	17th October 2003	info@gatewayforex.co.ke Fax: 254-20-2212942
27	Giant Forex Bureau de Change Ltd P. O. Box 56947 – 00200 Nairobi Tel: 827970	Unit 1- Departure	2nd Novembe r 1995	Fax: 254-2-825327

28	Give and Take Forex Bureau Ltd P. O. Box 51463 – 00200 Nairobi Tel: 7120581/3562152	Gigiri, China Garden Nairobi	1st November 2003	Fax: 254-2-7120046
29	Global Forex Bureau Ltd P. O. Box 47583 – 00100 Nairobi Tel: 6762982	2nd Floor, Tasir Complex, 1st Ave. Eastleigh, Nairobi	1st November 2003	
30	Glory Forex Bureau Ltd P. O. Box 42909 – 00100 Nairobi Tel: 2244333/2241164/2243115	Norwich Union House Kimathi Street, Nairobi	21st May 1998	gloryforex@yahoo.com Fax: 252-2-245614
31	GNK Forex Bureau Ltd P. O. Box 14297 – 00100 Nairobi Tel: 890303/891243/891848/892048	Jubilee Centre Karen Nairobi	1st November 2003	gnkforex@swiftkenya.com Fax: 254-2-892266
32	Green Exchange Forex Bureau Ltd P. O. Box 20809 – 00100 Nairobi Tel:+2540202214547/8/9	Emperor Plaza, Ground Floor, Koinange Street	17th August 2009	greenexchangeforexbureau@hotmail.com Fax: 254-2-2214550
33	Hodan Global Forex Bureau Ltd, P. O. Box 68811 – 00622 Nairobi Tel: 6763035, 0202084862	Hong Kong Shopping Mall, 2nd Fl, Kipanga Athumani St, Eastleigh		hodanglobal@hotmail.com Fax No. 254-2-6763955

34	Hurlingham Forex Bureau Ltd P. O. Box 85 – 00600 Nairobi Tel. 2724409 Mobile: 0773203279, 0722337140	China Centre, Ngong Road	3rd May 2007	info@hurlinghamforex.com
35	Industrial Area Forex Bureau Ltd P. O. Box 45746 – 00100 Nairobi Tel: 551186/551198	Bunyala Road, Industrial Area Nairobi	1st November 2003	Fax: 254-2-551186
36	Island Forex Bureau Ltd P. O. Box 84300 Mombasa Tel: 041-2223988/ 2229626	Moi Avenue, Mombasa	15th December 2003	islandforex@hotmail.com Fax: 254-41-2227057
37	Junction Forex Bureau Limited P. O. Box 43888 – 00100 Nairobi Tel: 3861268/9, 0725-852840	The Junction of Ngong Road/ Dagoreti Corner	1st December 2005	junctionforexbureaultd@yahoo.com
38	Kaah Forex Bureau Ltd P. O. Box 10327 – 00400 Nairobi Tel: 6767494/6760504	Eastleigh Section 11, Nairobi	1st November 2003	mobash33@yahoo.com Fax: 254-2-6767543
39	Kenza Exchange Bureau Ltd P. O. Box 21819 – 00400 Nairobi Tel: 822504/ 2245863	JKIA, Arrival Unit 1 Nairobi	9th September 2003	
40	L'ache Forex Bureau Ltd P. O. Box 45191 – 00100 Nairobi Tel: 3514509, 2119568/9, 0711-229408, 3752109	Diamond Plaza, 2nd Floor, Parklands	10th April 2004	info@lache.co.ke Fax: 254-2-2733485
41	Leo Forex Bureau Ltd P. O. Box 82304– 80100 Mombasa	T. S. S. Towers Nkrumah Road,	21st May 1999	leoforex@swiftmombasa.com Fax: 254-41-230399

	Tel: 041-2230396/7/8; 2230399	Mombasa		
42	Link Forex Bureau Ltd P. O. Box 11659 – 00400 Nairobi Tel: 2213619/21, 0724-256480	Uganda House – Arcade, Kenyatta Avenue, Nairobi	25th April 1995	Link-forex@yahoo.com Fax: 254-2-213620
43	Lion Bureau De Change Ltd P.O Box 4581-00200 Nairobi Tel: 0732911138, 0731863896, 0202600072	Taj Shopping Mall North Airport Road, Embakasi.	22rd February 2012	i info@lionbureau.com
44	Loki Forex Bureau Ltd. P. O. Box 12523 – 00100 Nairobi Tel: 0723-886999, 020-554822, 020-2117780	T&L Centre, Industrial Area, Nairobi	30th September 2005	nfbwesternunion@yahoo.com
45	Magnum Forex Bureau De Change Ltd P. O. Box 46434 – 00100 Nairobi	Nakumatt Mega, Uhuru Highway	17th August 2009	
46	Maritime Forex Bureau Ltd P. O. Box 43296 – 80100 Mombasa Tel: 041- 2319175/6/7	Iddi House, Nkrumah Road, Mombasa	1st November 2003	maritimeforex@africal.co.ke Fax: 254-41-2319178
47	Metropolitan Bureau De Change Ltd P. O. Box 7080 – 00300 Nairobi Tel: 827963	Unit 2 Departure, JKIA	7th September 1995	Fax: 254-2-252116
48	Middletown Forex Bureau Ltd P. O. Box 41830 – 00100 Nairobi Tel: 2211227	Westminister House Kaunda Street Nairobi	1st January 1998	mtforex@iconnect.co.ke Fax: 254-2-332534
49	Mona Bureau De	Panari	1st	Fax: 254-2-828113

	Change Ltd P. O. Box 46180 – 00100 Nairobi Tel: 828111/2, Cell: 0733-744348	Centre, Mombasa Road Nairobi	December 2005	
50	Moneypoint Forex Bureau Ltd P. O. Box 3338-00100 Nairobi Tel No. 020-2211346/7	Tubman Road, Ansh Plaza	27th June 2008	moneypointforex@hotmaill.com Fax:+254-20-2211342
51	Morgan Forex Bureau De Change Ltd P. O. Box 79012 – 00400 Nairobi Tel No. 020-4444073	Westlands	25th July 2008	morgankenya@gmail.com
52	Mustaqbal Forex Bureau Ltd P. O. Box 100745 – 00101 Nairobi Tel: 020-2497344	Eastleigh, Nairobi	19th December 2005	mustaqbalforex@yahoo.com Fax: 254-2-6766650
53	Muthaiga-ABC Forex Bureau Ltd P. O. Box 63533 – 00619, Tel: 4048883/4044146 Cell: 0722-362665/0733-362665	Muthaiga Shopping Centre, Nairob	mfbfx@live.com	
54	Nairobi Bureau De Change Ltd P. O. Box 644 – 00624, Village Mkt Nairobi Tel: 822884	Unit 2 JKIA Nairobi	6th July 1995	Fax: 254-2-241307
55	Nairobi Forex Bureau Ltd P. O. Box 12523 – 00100 Nairobi Tel: 2244767/2223039	Gujarat House Muindi Mbingu Street Nairobi	21st July 1995	Fax: 254-2-244767
56	Namanga Forex Bureau Ltd P. O. Box 12577 – 00100 Nairobi	Namanga	15th December 2003	

	Tel: 02-213642/ 045-5132476			
57	Nawal Forex Bureau Ltd P. O. Box 43888 – 00100 Nairobi Tel: 2720111	Chaka Place, Chaka Road	15th December 2003	Fax: 254-2-272011
58	Net Forex Bureau Ltd P. O. Box 102348– 00100, Jamia Nairobi Tel: 020 – 249999	Avenue House, Kenyatta Avenue	27th May 2008	Fax: 254-2-250088
59	Nevada Forex Bureau Limited, P. O Box 1544 - 00600 Nairobi, Tel: +254- 020 - 2113898, Mobile : 0722- 519399	Westlands Square,	1st September 2010	nevada@forex.com
60	Offshore Forex Bureau Limited P. O. Box 26650 – 00100 Nairobi Tel: 020 – 310837/8	Cianda House, Ground Floor, Koinange Street	12th May 2008	Fax: 254-02-310839
61	Pacific Forex Bureau Limited P. O. Box 24273 – 00100 Nairobi Tel. 310880, 310882/3	Lonhro House, Standard Street	27th November 2007	pacific@sahannet.com
62	Peaktop Exchange Bureau Ltd P. O. Box 13074 – 00100 Nairobi Tel: 2244371/313438, 0722 - 332518	20th Century, Mama Ngina/ Kaunda Streets, Nairobi	1st September 2004	Fax: 254-2-210210
63	Pearl Forex Bureau Ltd P. O. Box 58059 – 00200 Nairobi Tel: 2724769/ 2724778	Hurlingham Shopping Centre	1st January 1998	Fax: 254-2-2724770
64	Pel Forex Bureau Ltd P. O. Box 957 – 40100	Allmamra	25th Septembe	pel@swiftkisumu.com

	Kisumu Tel: 057-2024134/2044425	Plaza Oginga Odinga Road, Kisumu	r 1995	Fax: 254-57-2022495
65	Penguin Forex Bureau Ltd P. O. Box 3438 – 80100 Mombasa Tel: 041-316618/2228170	Nkrumah Road, Mombasa	1st Novembe r .2003	Fax: 254-41-2228194
66	Princess Forex Bureau Ltd. P.O. BOX 104140 – 00101 Nairobi Tel: +254 20 2217978	City House, Standard Street. Nairobi	12th February 2009	princessforexbureau@gmail .com
67	Pwani Forex Bureau Ltd P. O. Box 87200 – 80100 Mombasa Tel: 041-2221727/2221734/2221845	Mombasa Block 404 XV11/M 1 Abdel Nasseiz	16th August 1995	forex@pwaniforex.com Fax: 254-41-2221870
68	Rand Forex Bureau Limited P. O. Box 30923 - 00100 Nairobi Tel: 0722200815	Kampus Tower, Moi Avenue, Nairobi	28th May 2012	
69	Real Value Forex Bureau Limited P. O. Box 2903 – 00100 Nairobi Tel: 236044/55/66/77	Shariff Complex, 5th Avenue, Eastleigh	25th July 2008	
70	Regional Forex Bureau Limited P. O. Box 634 – 00100, Nairobi Tel. 313479/80,311953	Kimathi House, Kimathi Street	28th April 2008	Fax No. 312296
71	Rift Valley Forex Bureau Ltd P. O. Box 12165 Nakuru Tel: 051-	Merica Hotel Building Court Road	1st June 2004	riftvalleyforex@yahoo.com Fax: 254-51-2210174

	2212495/2210174	Nakuru		
72	Safari Forex Bureau Ltd P. O. Box 219 Eldoret Tel: 053-2063347	KVDA Plaza Eldoret	1st December 2004	Fax: 254-053-2063997
73	Satellite Forex Bureau Ltd P. O. Box 43617–00100 Nairobi Tel: 2218140/1, Cell: 0721-411300	City House Standard Street Nairobi	17th June 2004	satelliteforex@swiftkenya.com Fax: 254-20-230630
74	Simba Forex Bureau Limited P. O. Box 66886 – 00800 Nairobi Tel. 020 – 445995, 0722 – 703121	Moi International Airport, Mombasa	16th April 2008	Fax No: 020 – 4443706
75	Sisi Forex Bureau Limited P.O. Box 60770 - 00200 Nairobi Tel: 2445846/0722-382995	Agip House, MHaile Selasie Avenue	22nd October 2012	sisiforex@sisi.co.ke
76	Sky Forex Bureau Limited P. O. Box 26150 – 00100 Nairobi Tel: 020-2242062/3	20th Century, Mama Ngina/ Kaunda Street	12th May 2008	Fax No. 020-2242064
77	Solid Exchange Bureau Ltd P. O. Box 19257–00501 Nairobi Tel: 822922/0722-853769	JKIA-Unit 2	6th July 1995	Fax: 254-2-822923
78	Sterling Forex Bureau Ltd P. O. Box 43673 – 00200 Nairobi Tel: 2228923/340624	Laxmi Plaza, Biashara Street	27th November 1995	info@sterlingforexbureau.com Fax: 254-2-330894
79	Sunny Forex Bureau Limited P. O. Box 34166 – 00100 Nairobi Tel: 2252013/252079	Uniafric House, Koinange Lane	26th June 2008	sunnyfoexbureau@yahoo.com Fax:254-2-252076

80	Taipan Forex Bureau Ltd P. O. Box 42909 – 00100 Nairobi Tel: 827378	JKIA, International Arrivals Terminal	6th June 1995	taipan@africaonline.co.ke Fax: 254-2-229665/248676
81	Tawakal Forex Bureau Ltd P. O. Box 71623 – 00622 Nairobi Tel: 6766171	Ubah Centre, Eastleigh Nairobi	1st November 2003	tfbureau@yahoo.com Fax: 254-2-6765756
82	Tower Forex Bureau Limited P.O. Box 25934 - 00100 Nairobi Tel. 0723434343, 0739270511, 0772372744	I & M Bank Tower, Kenyatta Avenue	24th July 2012	nim711@hotmail.com
83	Trade Bureau De Change Ltd P. O. Box 7080 – 00300 Nairobi Tel: 2241107	Cotts House City Hall Way Transnational Bank	21st May 1999	trade@wananchi.com tradebdc@yahoo.com Fax: 254-2-317759
84	Travellers Forex Bureau Ltd P. O. Box 13580 – 00800 Nairobi Tel: 447204/5/6	The Mall Westlands	7th September 1995	Fax: 254-2-443859
85	Travel Point Forex Bureau Limited P. O. Box 75901 – 00200 Nairobi Tel. 827872, 827877	JKIA, International Arrivals Terminal	11th February 2008	
86	Union Forex Bureau Ltd P. O. Box 43847– 00100 Nairobi Tel: 4441855/4448327/4447618	Sarit Centre Westlands	1st January 1999	unionforex@hotmail.com Fax: 254-2-4441855
87	Ventures Forex Exchange Bureau Ltd P.O. Box 2665 - 00200	Bishop Magua Centre,	26th August, 2013	wanjiru101@yahoo@.com

	Nairobi Tel: 0722650195	1st floor, along Ngong Road,		
88	Victoria Forex Bureau De Change Ltd P. O. Box 705 – 40100 Kisumu Tel 057-2025626/2021134/2023809	Sansora Building Central Square Kisumu	1st September 2005	Fax: 254-57-202536
89	Wallstreet Bureau De Change Ltd P. O. Box 6841- 30100 Eldoret Tel: 053-2062907	Bargetuny Plaza Uganda Road Eldoret	8th January 1999	Fax: 254- 53-2062907
90	Wanati Forex Bureau Limited P. O. Box 88309 – 80100 Mombasa Tel: 0202107500 Cell: 0726925090/0733702668	Diani, Mombasa	26th May 2009	
91	Warwick Forex Bureau Ltd P. O. Box 49722 – 00100 Nairobi Tel: 7124072 Cell: 0721253664	The Warwick Centre Gigiri Nairobi	1st November 2003	warwickforex@wananchi.com warwickforex@gmail.com Fax: 254-2-520997
92	Westlands Forex Bureau Ltd P. O. Box 45746 – 00100 Nairobi Tel: 3748786	Westgate, Westlands Nairobi	1st November 2003	westforex@wananchi.com Fax: 254-2-3748785
93	Yaya Centre Exchange Bureau Ltd P. O. Box 76302 – 00508 Nairobi Tel: 02-3869097	Yaya Centre	6th June1995	Fax: 254-2-3870869

94	ZTA Forex Bureau Ltd P. O. Box 51779 - 00200 Nairobi Tel: 0722792279	Greenhouse 1st floor, along Ngong Road	12th August 2013	

No	Name of MFIs	Physical Address	Date of issue of License	E-mail Address & Fax
95	**Faulu Kenya DTM Limited** P. O. Box 60240 – 00200, Nairobi Tel :020- 3877290 -3/7, 38721883/4	Faulu Kenya House, Ngong Lane -Off Ngong Road	21st May 2009 Branches: 27	info@faulukenya.com, customercare@faulukenya.com Website: www.faulukenya.com Fax: +254-20-3867504, 3874875
96	**Kenya Women Finance Trust DTM Limited** P. O. Box 4179-00506, Nairobi Tel :020- 2470272-5, 2715334/5, 2755340/42 , 070 - 3067000	Akira House, Kiambere Road, Upper Hill,	31st March 2010 Branches: 24	info@kwftdtm.com Website: www.kwftdtm.com
97	**SMEP Deposit Taking Microfinance Limited** P. O. Box 64063-00620 Nairobi Tel 020-3572799 / 26733127 / 3870162 / 3861972 / 2055761	SMEP Building - Kirichwa Road, Off Argwings Kodhek Road	14th December 2010 Branches: 6	info@smep.co.ke info@smep.co.ke info@smep.co.ke Website: www.smep.co.ke Fax: +254-20-3870191
98	**Remu DTM Limited** P. O. Box 20833-00100 Nairobi Tel :020- 2214483/2215384/ 2215387/8/9, 0733-554555	Finance House, 14th Floor, Loita Street	31st December 2010 Branches: 3	info@remultd.co.ke info@remultd.co.ke info@remultd.co.ke
99	**Rafiki Deposit Taking Microfinance** P.O.Box 12755-00400 Nairobi	Physical Address: : 2nd Floor, El-	14th June 2011 Branches: 3	info@rafiki.co.ke Website: www.rafiki.co.ke

	Tel : 020-216 6401 0719 804 370/0734 000 323	roi Plaza, Tom Mboya Street		
100	**UWEZO Deposit Taking Microfinance Limited** P.O.Box 1654-00100 Nairobi Tel :020 2212917 / 9	Park Plaza Building, Ground Floor, Moktar Daddah Street	08 November 2010 Branches: 2	info@uwezodtm.com Website: www.uwezodtm.com
101	**Century Deposit Taking Microfinance Limited** P. O. Box 38319 – 00623, Nairobi Tel :020- 2664282, 20 6768326, 0722 168721, 0733 155652	KK Plaza 1st Floor, New Pumwani Road, Gikomba	17th September 2012 Branches: 1	info@century.co.ke
102	**SUMAC DTM Limited** P. O. Box 11687-00100, Nairobi Tel :020 2212587, 20 2210440	Consolidated Bank House 2nd Floor, Koinange Street	29th October 2012 Branches: 1	info@sumacdtm.co.ke Website: www.sumacdtm.co.ke Fax: (254) 2210430
103	**U&I Deposit Taking Microfinance Limited** P.O. Box 15825 – 00100, Nairobi Tel : 020 2367288, 0713 112 791	Asili Complex Building 1st Floor, River Road	8th April 2013 Branches: 2	info@uni-microfinance.co.ke Website: http://uni-microfinance.co.ke/uni-microfinance/ Fax: (254) 2210430

No	Name of CRBs	Physical Address	Date of issue of License	E-mail Address & Fax
104	**Credit Reference Bureau Africa Limited** P.O. Box 46406, 00100 NAIROBI, KENYA	CRB Centre, Prosperity House, Westlands Road, Off	9th February 2010	info@crbafrica.com Website: www.crbafrica.com Fax: +254 (0) 20 3751344

	Tel : 020 3751799/3751360/2/4/5	Museum Hill, Westlands		
105	**Metropol Credit Reference Bureau Limited** P.O. Box 35331, 00200 NAIROBI, KENYA Tel :020 2689881/27113575 0727 413 733/ 732 774 666	1st Floor, Shelter Afrique Centre, Upper Hill, Nairobi	11th April 2011	creditbureau@metropol.co.ke Website: http://www.metropolcorporation.com Fax: +254 (0) 20 273572

No	Name of MRPs	Physical Address	Date of issue of License	E-mail Address & Fax
106	**Amal Express Money Transfer Ltd** P.O. Box 3165 – 00100 NAIROBI Tel: +254723281122/ 254722878597	Amal Plaza, 2nd floor, 1st Avenue Eastleigh, Nairobi.	3rd June 2014	info@amalexpress.co.ke
107	**Continental Money Transfer Ltd** P.O. Box 49387 – 00100 NAIROBI Tel: 020-2217138/40, 0705952520	Eco Bank Towers, 8th floor, Muindi Mbingu Street, Nairobi.	12th May 2014	support@continentalmoneytransfer.com info@continentalmoneytransfer.com
108	**Dahabshill Money Transfer Limited** P.O. Box 68991 – 00622 NAIROBI Tel: +254 020 2222728/9, 0720169999	20th Century Building, Standard Street, Nairobi.	19th November 2013	ken.dmtc@dahabshiil.com

109	**Iftin Express Money Transfer Limited** P.O Box 100184 – 00100 NAIROBI Tel: +254 (0) 20 2629818	Amco Shopping Mall, 1st Avenue Eastleigh	10th July 2014	iftinforex@gmail.com
110	**Juba Express Money Transfer Limited** P.O Box 17773-00100 NAIROBI Tel: +254 (0) 20 2240540, 0735 699669	Hamilton House, Kaunda Street	10th July 2014	: info@jubaexpress.co.ke zainab.mohamed02@gmail.com; adbiciye@gmail.com
111	**Kendy Money Transfer Limited** P.O Box 76163 – 00508 NAIROBI Tel: +254 (0) 20 2377054 Email Date Licensed:	Bemuda Plaza, off Ngong Road.	21st March 2014	info@kendytechnologies.co.ke
112	**UAE Exchange Money Remittance Limited** P.O Box 51695 – 00100 NAIROBI Tel: +254 (0) 20 2220101	IPS Building, Kimathi Street, Nairobi.	20th March 2014	kimathistreet.branch@ke.uaeexchange.com

APPENDIX II: Independent Variable (ROA)

Year	Quarter	ROA
2004	**1**	1.5
	2	1.5
	3	1.5
	4	1.5
2005	**1**	1.4
	2	1.4
	3	1.4

	4	1.4
2006	**1**	2.5
	2	2.5
	3	2.5
	4	2.5
2007	**1**	2.1
	2	2.1
	3	2.1
	4	2.1
2008	**1**	2.4
	2	2.4
	3	2.4
	4	2.4
2009	**1**	3.5
	2	3.5
	3	3.5
	4	3.5
2010	**1**	1.9
	2	1.9
	3	1.9
	4	1.9
2011	**1**	3
	2	3
	3	3
	4	3
2012	**1**	2.2
	2	2.2
	3	2.2
	4	2.2
2013	**1**	2.6
	2	2.6
	3	2.6
	4	2.6

Source: CBK

APPENDIX III: Selected Macroeconomic Variables

Year	**Quarter**	**Inflation Rate**	**Currency Exchange Growth Rate**	**Average QuarterlyInterest rate**	**QuarterlyGDP Growth Rate**

2004	**1**	9.1	-2.2782	13.35	-1.9823
	2	6	-1.0254	13.45	-0.2352
	3	14.4	0.2365	13.56	-0.5563
	4	17.6	0.1254	13.58	0.8345
2005	**1**	14.3	-1.5698	13.633	0.7161
	2	14.2	-1.3564	13.638	0.3324
	3	7.5	0.2536	13.725	1.1503
	4	4.4	2.6549	13.745	1.7012
2006	**1**	8.4	2.0655	13.8613	1.0556
	2	4.3	0.2135	13.8733	2.2572
	3	4.9	-0.3324	13.8825	0.1385
	4	6.6	-1.5874	13.8933	2.4291
2007	**1**	3.4	-1.0654	13.66	3.9421
	2	2.7	-1.0269	13.32	2.1101
	3	5.3	-1.0469	13.06667	0.6043
	4	5.6	-0.6954	13.31667	0.8298
2008	**1**	10.5	-0.2315	13.89333	-0.4625
	2	17.4	0.0265	13.99333	2.5514
	3	15.9	0.2368	13.74	-2.4418
	4	16.6	1.3658	14.41667	4.1401
2009	**1**	14.1	1.5698	14.77333	1.3529
	2	10.6	1.8279	14.88333	2.4012
	3	9.8	0.3256	14.76333	1.8351
	4	8	0.2654	14.79667	1.9022
2010	**1**	5.5	0.2368	14.97333	-0.5965
	2	3.7	-1.6597	14.47	4.0381
	3	3.3	0.1254	14.15	4.7703
	4	3.8	0.2365	13.89	3.2365
2011	**1**	7	1.0328	13.64	-0.5512
	2	13.2	1.2365	13.90333	-0.2361
	3	16.5	1.0253	14.41333	8.2425
	4	19.2	-1.0658	17.91	-0.1866
2012	**1**	16.9	-0.0235	20.05333	-0.5308
	2	11.8	-0.1295	20.21333	2.8137
	3	6.4	-0.2301	20.00333	4.3704
	4	3.5	0.1982	18.64333	2.8877
2013	**1**	4.1	0.0354	17.91667	1.5214
	2	4.4	1.3256	17.42667	-0.8819
	3	7	0.1256	16.94667	0.9443
	4	7.4	0.5632	16.96	3.0226

Source: CBK and KNBS