THE EFFECT OF MACROECONOMIC FACTORS ON FINANCIAL PERFORMANCE OF INVESTMENT BANKS IN KENYA

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DECLARATION

I declare that this research project report is my original work and has not been submitted for examination to any other university.

Signature…… Date……

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

Signature…… Date……

Mr. Dan Chirchir

Signature…… Date……

Dr. Erastus Sifunjo

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DEDICATION

This project is dedicated to all those who supported and encouraged me throughout the research period.

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LIST OF ABBREVIATIONS

CBK	Central Bank of Kenya
CMA	Capital Markets Authority
CPI	Consumer Price Index
GDP	Gross Domestic Product
GNP	Gross National Product
KPI	Key Performance Indicator
KNBS	Kenya National Bureau of Statistics
M0	Currency in the hands of the public, banks' statutory reserve deposits.
M1	Currency held outside the banking system and the current account deposit liabilities of commercial banks held for transaction purposes.
M2	It includes all of M1, the liquid assets, and a collection of additional assets that are slightly less liquid.
NSE	Nairobi Securities Exchange
ROA	Return on Assets
ROCE	Return on Capital Employed

ABSTRACT

The aim of this research project was to establish the effect of macroeconomic factors on financial performance of investment banks in Kenya. Return on capital employed was used as the financial performance indicator. The financial performance was regressed against the macroeconomic indicators; GDP growth rate, real exchange rate (Ksh/USD), inflation rate as computed by CPI and money supply. Both the dependent and independent variables were measured quarterly. A descriptive research design was employed in the research study. The study population comprised 24 investment banks that are licensed by CMA in Kenya by the year 2016. The study utilized secondary data that was collected quarterly. The data was collected from various sources; the World Bank, Central Bank of Kenya, Kenya National Bureau of Statistics and the industry financial statements as reported by CMA. The study was carried out in a fifteen-year period from 2002 to 2017. The analyzed data was presented using tables and line graphs. The study found that GDP growth rate had a P-value of (0.0263<0.05) which is statistically significant while exchange rate had a P-value of (0.3831>0.05), inflation rate had a P-value of (0.0928>0.05), M1 had a P-value of (0.9224>0.05) and M3 had a P-value of (0.4800>0.05). These P-values are greater than 0.05 and therefore statistically insignificant; hence, interest rates, exchange rates and money supply are not suitable predictors of the investment bank's financial performance. It is crucial that other factors both micro-economic and industry specific factors are considered while undertaking similar study in order to determine the drivers of performance of the investment banks. The research study recommends that the CBK should keep inflation, exchange rates and GDP Growth rates in check. These variables have profound effect on the performance of investment banks. For instance, high exchange rates, translates to devaluation of the local currency and will cause a decrease in the performance of the industry. The study also recommends that the government to initiate policies and measures that increase the GDP, which will lead to a positive effect on the industry and the economy as a whole.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Access to investment banking has been a major challenge to investors in the rural areas with barriers such as illiteracy, lack of information or knowledge on investment banking amongst others. A few Kenyans who access the investment bank services are concentrated in Nairobi and a few more major towns. Investment banks are important in the capital markets and securities exchange as they provide underwriting services to companies, corporations and individual investors. They also play a role in providing Mergers & Acquisitions services. Investment banks being in the banking industry that is rapidly growing and a key contributor towards economic growth, it therefore spells out the need to look into the macroeconomic factors influencing the performance of investment banks. This information is very crucial to every citizen be it in the urban town or rural areas since every citizen is a contributor towards the economic growth of the nation.

For any business to survive, managing uncertainty and risk, which majorly include the macroeconomic factors and the source of financing is very important. Financial planning is key for any business to successfully meet its goals. Investment banking in Kenya is rapidly growing, however emergent issues such as price volatility, currency exchange volatility, uncertainty in economic growth, increase or decrease in money supply is still

persistent. Most people do not distinguish investment banks from the commercial banks. The literature of the study thus explains the meaning of the investment banks and clearly define what they are constituted to do. Normally, investment banks are instituted not to take deposits; this is the main distinction between commercial banks and investment banks. Between 1933 (Glass–Steagall Act) and 1999 (Gramm–Leach–Bliley Act), the US kept a split between commercial banks and investment banking.

According to Morrison AD (2007), investment banks are divided into two private and public functions. The aspect of information asymmetry separates the two. Information is prevented from crossing from private to public and vice versa. To this regards, banks' private areas deal with information that is not made available to public, while the public areas deal with information that is known to the public. Investment Banks are key players within the capital markets in Kenya where corporate bodies and the government can raise long-term capital. According to the Capital Markets Authority (CMA), there are 24 Investment Banks in Kenya as at the year 2017. In addition, the Capital Market Authority regulates all the investment banks.

1.1.1 Macroeconomic Factors

According to the world bank (2012) a report that involved indicators of world development a macroeconomic factor was defined as one factor that is pertinent to a broad economy, at all levels be it regional or national levels. The macroeconomic factors must have an effect to a large population. The factors include GDP growth rate, inflation, saving, investments, interest rates, Exchange rate, and money supply.

Maghyereh (2002) in his study argued that the macroeconomic environment is the ground for any national economy. A macroeconomic environment that is conducive promotes the financial performance of businesses, which in turn make them remain a going concern in the near future.

In Kenya, the capital market work in an economic environment. This environment is comprised of the macroeconomic and microeconomic factors. By definition, macroeconomic factors are beyond the control of the firm and therefore they may have an effect to the firms operations. The macroeconomic environment is described by characteristics referred to as macroeconomic variables as the major parameters that have an influence on the entire economic environment in which firms operate.

1.1.2 Financial Performance

How best a firm uses its assets from its core business it is a determinant of financial performance, it is also used to measure how financially healthy an organization is over a period. Firms in the same industry can be compared to determine how best they are performing using financial measures such as financial ratios.There are several ways that measure financial performance; all parameters should as well be taken into aggregation to give a sound judgment. The financial analyst or the investor, who may wish to look closely into financial statements in order to determine the financial performance of a firm, uses elements like revenue from operations, operating income and cash flow from operations.

According to Fitz-Gibbon (1990) a key performance indicator (KPI) can do performance measurement. An organization may use the key performance indicator to evaluate its success or failure. KPI may also be defined as the measures that a company may use to gauge its success and compare performance with other firms. KPI vary amongst firms depending on their priorities of key financial performance parameters. A company's success will not only be measured financially, but also strategically. A successful company positions itself in a manner that its operations go hand in hand with the set goals and the vision of that particular company.

This study investigated the effect of macroeconomic factors on financial performance of investment banks in Kenya.

1.1.3 Effect of Macroeconomic Factors on Financial Performance

Inflation is defined as the general positive change in the prices of commodities in a given duration. Inflation pushes the price of commodities without having any positive impact on the real value of the commodities. Boyd, Lavine, & Smith (2001) Argued that there is a significant negative relationship between inflation and banking sector performance. Further to the study, the relationship is nonlinear. As inflation rate increases, the marginal effect of inflation on banking sector diminishes swiftly. Moreover, for those economies with an inflation rate of more than 15%, there is a significant drop in the financial performance of the banking sector.

Generally, inflation does not have any positive effect towards the value of commodities. Investment banks are therefore adversely affected by inflation since individuals and

corporates tend to hold investments over a duration of time until price fluctuations stabilize. Inflation has an adverse effect on the ROCE of investment banks. This is because most individuals and corporates will choose to disinvest or sell their investments. Financial performance of investment banks has a significant relationship with Gross Domestic Product. A higher GDP implies that there is a higher attractive opportunities for entrepreneurs and investors which in turn lead to many investors seeking advisory services from investment banks on what securities and in which companies they need to invest in. Jeng & Wells (2000) in his study found that there GDP has no significant effect on financial performance.

The GDP is a proxy to economic performance of a country and represents the value of all goods and services produced in a particular year in a certain country, exclusively utilizing resources of that country. A study by Gompers (1998) showed that the higher the GDP growth, the higher the number of attractive opportunities for entrepreneurs. This will as well lead to need for venture capital. During the period of a higher GDP, investment banks obtain so many clients in need of advisory services on investments in the capital markets. This translates to a more diversified portfolio for individual and corporate investors.

Exchange rate is known to measure the competitiveness of internationals. This is also known as index competitiveness. Hinchberger (2013) in his study noted that the index has a positive relationship with the competitiveness of the currency in any given country. In most cases, foreign exchange rates can be volatile and this in turn places a risk to any firm conducting business with foreign markets. The main risk would be

reduction of profits realized when exchange is done for domestic currency. The exchange rate risk will have an effect to price competitiveness of a product whose costs are incurred in a foreign country.

1.1.4 Investment Banks in Kenya

According to Barth (2000) investment banks do not take deposits, but give services such as recommending offers of securities to the public, take-overs, mergers and acquisitions, restructuring of companies listed in securities exchange. According to Morrison AD (2007) investment banking is involved in and trading of a large range of securities such as stocks or shares , bonds and currencies and other financial instruments in the financial markets. All of these securities can be traded directly by use of derivatives such as futures, options and swaps. This help the clients to manage their risks.

There has been a remarkable rise in investment Banking Activities in Kenya. In 2002, the first investment bank-CFC Financial Services, obtained its license from the Capital Markets Authority thereafter the sector witnessed declining growth. It is thought that the regime before 2002 did not provide a sound financial and economic breeding ground for upstarts. In Kenya, all investment banks are regulated and licensed by the Capital Markets Authority this is upon meeting the requirements by the CMA Act. Capital Markets Licensing Regulations 2002, defines investment banks as non-deposit taking institutions authorized to give investment advice and offers of securities to the public, take-over, acquisitions and restructuring involving companies listed in the NSE, buying and selling of securities on behalf of clients; promoting or arranging underwriting or

issuance of securities; and contractual portfolio management. According to CMA (cap 448) an advisor who offers investment banking services must be a licensed dealer and regulated by the NSE and capital markets Authority

Today, notable Investment Banks in Kenya include; Dyer and Blair, Old Mutual Securities Exchange, Drummond Kestrel Capital, African Alliance and Suntra Investment Banks, Equity investment bank, ABC Capital among others. Majority of the current Investment Banks in Kenya were formerly Stockbrokers and some retain that function though not to a larger extent as they used to do in the past.

Investment Banking industry in Kenya has thrived in the recent past, Dyer and Blair been the leader in the market and the greatest in the East African region. Initially the bank started as a partnership with Hickman and Grey. In addition, it is noted that it was one of the founder members of the Nairobi Securities Exchange, which was established in the year, 1953. Thus the first Investment Bank to have regional coverage in Kenya, Uganda and Rwanda.

The Primary Role of Investment Banks is to assist clients raise funds in the Capital Markets. The growth of Investment Banking in Kenya is attributed to the rise in number of Initial Public Offers (IPOs) from many Companies operating in the Country.

1.2 Research Problem

Macroeconomic theories have suggested that, financial performance may be largely influenced by macroeconomic variables, such as GDP, inflation, money supply and foreign exchange rate. For instance, the fiscal policy theory suggest that positive

innovation in government spending, results to a persistent increase in consumption of income, whereby the aggregate saving may be converted to investments. The monetary theory of inflation, has also suggested that increase in money supply leads to increase in inflation rate. Inflation rate has a great impact on the ability of investors to invest and therefore focused on establishing how increased money supply affected performance of investment banking in Kenya. The classical theory has important aspects that the study focused on, particularly the natural and the real GDP and how the two impact on the performance on investment banks in Kenya. Kung'u (2013) suggested that there exists direct association among GDP growth, inflation, interest rates and Kenya shilling appreciation and foreign currency. This association is characterized by increased return on a portfolio. Consequently, a negative association was expected between, GDP growth and Kenya shilling depreciation, unexpected inflation and increased lending interest rates. This relationship is however characterized by a drop of portfolio returns. There are other factors that are specific to a firm which have an impact on performance, such as firm size, firm capital base, leverage and liquidity.

Most past studies have concentrated on other sectors other than investment banking, and therefore need to study on key macroeconomic factors that affect the performance of the investment banks. For Instance, Desaro (2012) did a study on the relationship between macroeconomic factors and the financial performance of commercial bank in Kenya. She established that the ROCE 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 returns of deposit

taking MFIs 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 ROCE. Kungu (2013) in his study concluded that macroeconomic factors have an impact on the return on investment of Private equity firms. Cliff & Willy (2014) in their study concluded that macroeconomic factors have an effect on the performance of manufacturing firms. Kiganda (2014) in his view, macroeconomic factors have no effect on commercial banks profitability; however, internal factors relating to management significantly determine the profitability of the bank.

There is a contextual gap since very few researches have been done on investment banks in Kenya. In addition, macroeconomic factors have greatly affected performance of many firms in Kenya and therefore it is important to study the macroeconomic factors establishing their impact on performance of investment banks. There is also a research gap as most studies have shown that there exists an effect of macroeconomic factors on performance of various firms though not significant. This study therefore focused on the effect of macroeconomic factors on the performance of investment banks in Kenya. The study conclusively answered the research question, what is the effect of macroeconomic factors on financial performance of investment banks in Kenya?

1.3 Research Objective

The objective of the study is to establish the effect of macroeconomic factors on the financial performance of investment banks in Kenya.

1.4 Value of the Study

The findings of the study will assist in providing knowledge on how sampled macroeconomic factors affect the financial performance of investment banks in Kenya. It will therefore be of a significant contribution to the already known literature of how macroeconomic factors affect financial performance. This will also present an avenue for other potential studies in this field. As investment banking gains more prominence globally, it is imperative that more in-depth and wide-ranging studies will be conducted in this area.

The research will provide the management of the investment banks in Kenya with an opportunity to air their views on the required mechanisms that will aid in enhancing stakeholders' value and protecting their interests by improving the financial performance and accountability to provide the investors with more assurance on management's credibility and stewardship. Enhanced financial performance is essential in boosting investors' confidence in the investment banks, which would in turn, is beneficial to management's existence. The study will help Capital Markets Authority, the industry regulator, and the Government of Kenya in formulating appropriate regulations and policies for the capital markets industry. The policies developed by the Authority and the Government will promote growth in domestic and regional capital markets. The capital markets authority will also learn on who the macroeconomic factors affect performance and therefore place policies on how to ensure high performance

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter outlines the contextual issues in investment banking. It explains the literature in the area of selected macroeconomic factors and the financial performance of investment banks. The chapter also review the literature by other scholars especially on studies based on macroeconomic factors and the performance of investment banks. The chapter also explains the theories that anchor the study. Then presents a conceptual framework on the measurement of financial performance of investment banks. A summary of gaps to be filled in the study in relation to the research problem is also given.

2.2 Theoretical Review

This subsection is concerned with the theoretical framework that anchors the study. The value of this section is majorly, to narrow the range of fact that the study will focused on, suggests which research approaches yield the greatest meaning, summarizes what is known about the study, predicts further facts that should be found. The theories are macroeconomic theories that anchor the study. Each of the variable is explained by a specific macroeconomic theory.

2.2.1 Fiscal Policy Theory

John Maynard Keynes developed this theory in 1950's. According to Mankiw (1993) the theory demands a certain fraction of output to be set aside for the purposes of the government. The theory explains the reaction the economy would have if the government decides to change taxation and spending policies. According to this theory from period to period the government must review it budget so that it does not run surplus or deficit budgets. Fiscal policy is mainly concerned with those aspects that the government is concerned with collection and disbursement of money. These aspects are taxation and spending.

Anderson (2005) in his study on fiscal reforms suggested that, the effects of fiscal policy depends on the political goals of policy makers. For instance, a tax cut can have a bigger impact on the middle class citizens than any other group; this is because the middle class are the largest economic group. On the other hand, a decision of government spending will affect a specific group of the economy. Those that are in government and have the authority to make decisions on taxation and spending control the fiscal policy.

Battaglini & Coate (2014) did a study on political economy theory of fiscal policy and suggested that, in order to prevent economic fluctuations the government exercises fiscal policy. For instance, the government may undertake discretion fiscal policy to minimize economic fluctuations. Blinder (2008) suggested according this theory, there are two types of fiscal policies, which are; expansionary and contractionary. By definition expansionary fiscal policy is concerned on reduction of the rate of unemployment by

particularly increasing government spending and/or reduction of taxation as a result better GDP and reduced rate of unemployment is realized. On the other hand, contractionary fiscal policy is concerned in decreasing government spending and/or increase of taxation. These results to, reduced inflation. The macroeconomic effect of the fiscal policy is under two circumstances, the reduced expenditure and reduced revenue. A reduced expenditure has a small effect on GDP and do not significantly affect private consumption, on the other hand, reduced revenue affect GDP and private investment inversely.

2.2.2 The Classical Theory

Adam Smith, Jean-Baptiste Say, David Ricardo, Thomas Robert Malthus, and John Stuart Mill developed this theory in the late 18th and 19th century. Andolfatto (2005) According to his book, this theory suggests that, economy is self-regulating. According to classical theory economists, the economy can achieve real GDP naturally, if the economy's resources are optimally employed. In a scenario where the economy falls or exceeds the natural real GDP, mechanisms within the market systems are put in place to change the economy and return it to the natural real GDP. The fact that the economy can regulate itself to a natural real GDP is based on the Say's Law, Solow & M. (1956) which states that economy is normally capable of allocating the output that worker and firms chose to produce. This means that when and the economy produces a certain level of GDP, it is capable of also generating an income to purchase the real GDP.

Though Say's law suggests that income attributed to production of certain GDP level, must be adequate to purchase the real GDP, it is not guaranteed that all the income will be spend. Some is saved. The saved income is however not used to purchase consumption good and therefore this will result to an increased aggregate supply as compared to the aggregate demand, due to aggregate saving. Consequently, suppliers will reduce the quantity of resources. As a result, real GDP falls below the natural GDP and hence real GDP may not be achieved due to aggregate saving. To counter the problem of aggregate savings classical theorists suggested that income that is not spend may be borrowed for investments, which are a component of real GDP.

2.2.3 Monetary Theory of Inflation

This theory was developed in 1867-1960 by Freidman who suggests that growth of money supply is due to increased inflation and hence as money supply grows faster the rate of inflation increases much more. Barro & Gordon (1938) argued that he price of commodities is proportional to the supply level of money while holding other factors constant and therefore, doubling money supply will double the prices of items as well.it is the central bank that sets money supply level and thus it has the mandate to increase or reduce the supply of money. According to Bernanke & Woodford (1997) monetary theory of inflation is long run and thus increased money supply in a particular year may not cause an increase in inflation concurrently.

Monetarists suggest that inflation occurs when money supply rises faster compared to national income growth. Consequently, inflation is reduced if money supply rises

national income grows proportionately. According to Freidnad (1960) monetary policy affects more than the fiscal policy on economic stabilization. Inflation in developed countries is always due to increase in money supply, this is not the case in developing countries, and instead elements related to financial imbalances, such as high growth of money and exchange depreciation dominate the inflation process.

2.2.4 Purchasing Power Parity Theory (PPP)

Professor Gustav Cassel of Sweden propounded purchasing power parity theory. According to this theory, Rogoff (1996) argued that, rate of exchange between two countries depends upon the relative the purchasing power of their respective currencies. Such will be the rate, which equates the two purchasing powers. According to Suranovic (1997) Purchasing power parity (PPP) is a theory, which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. This means that the exchange rate between two countries should equal the ratio of the two countries' price level of a fixed basket of goods and services. When a country’s domestic price level is increasing for instance a country experiences inflation, that country's exchange rate must be depreciated in order to return to PPP.

Ethier (1995) argued that the basis for PPP is the "law of one price". The law of one price only applies to tradable goods; immobile goods such as houses, and many services that are local, are of course not traded between countries. In the absence of transportation and other transaction costs, competitive markets will equalize the price of an identical good in two countries when the prices are expressed in the same currency. Announcements about interest rate changes, changes in perception of the growth path of

economies and the like are all factors that drive exchange rates in the short run. PPP, by comparison, describes the long run behavior of exchange rates. The economic forces behind PPP will eventually equalize the purchasing power of currencies.

2.3 Factors Affecting performance of Investment Banks

Other factors affecting performance of investment banks other than the macroeconomic factors include, and not limited to the size of the firm, the capital base, liquidity and leverage.

2.3.1 The Size of the Investment Bank

The investment bank size may have positive impact on financial performance since bigger firms may benefit from financial aids from sponsors and donors. Large companies have an easy access to factors of product ion including capital and human labor... In the capital structure theory, capital structure is considered relevant in measuring the financial performance of any firm. This theory has been contradicted by recent studies, which suggest that in determining corporate performance, capital structure play an important role. Barton & Gordon (1988**)** in his study suggested that companies that report high profits are less leveraged since they are able to raise their own capital out of the retained earnings. On the other hand, highly leveraged firms have a high risk of been bankrupt. Total company assets are said to positively impact on the company's financial performance.

Doğan (2013) did a study on whether firms size influence its profitability, in is analysis Return on Assets (ROA) was used as indicators of firm profitability and total assets, total sales and number of employees was used as indicators of size. The result of analysis indicated a positive relation between size indicators and profitability of firms. Control variables as the age of the firms and leverage rate were found in a negative relation with ROA, but liquidity rate and ROA were determined to have a positive relation.

2.3.2 Capital Base

Siro (2013) did a study on the effect of capital structure on financial performance of listed companies. The results showed that, there is an inverse relationship between the capital structure and the financial performance of the listed companies. The higher the debt ratio, the lesser the return in equity. This translates to a call for more capital to be injected into the company. A firm's capital structure refers to the mix of its financial liabilities. As financial capital is an uncertain but critical resource for all firms, suppliers of finance are able to exert control over firms. Harris & Raviv (1991) debt and equity are the two major classes of liabilities, with debt holders and equity holders representing the two types of investors in the firm. Each of these is associated with different levels of risk, benefits, and control. It is the way the corporation finances its assets through some combination of equity, debt, or hybrid securities.

A firm's capital structure is then a composition or structures of its liabilities. Investment banks with a higher capital base are expected to perform very well financially. This is a

result of such investment banks will have profitable investment opportunities. Investment banks with good capital base and operating decisions are expected to perform well, unlike those investment banks whose low capital base will reduce long run profitability.

2.3.3 Leverage

Leverage is the proportion of debt to equity of the capital structure of any given firm. For investment banks to perform financially well they need to ensure optimal capital structure. Optimal capital structure is the mix of debt and equity that maximizes the stock price. At any point in time the banks management has a specific target capital structure in mind presumably the optimal one. Although this target may change, overtime due to some factors that influence the investment banks' capital structure.

These factors may include, business risk, tax position, need for financial flexibility and growth opportunities. Generally, there are two main forms of leverage: financial leverage and opportunity leverage, by definition, financial leverage is the extent to which fixed income securities such as debt are used. On the other hand, operating leverage is the extent to which fixed cost are used in a firm's operations. A high degree of operating leverage, implies a small change in turnover results to a large change in ROI.

2.3.4 Liquidity

It is defined by the international reporting standard (2006) as the cash available for a going concern company in the near future after taking into account all obligation corresponding to the current financial period. When external finance is not available, le liquid assets may be used to finance investments. High liquidity is of an advantage o investment banks since it is able to meet unexpected obligations and to meet all obligations during the times of low earnings. Jovanovic (1982) did a study to establish existing relationship between liquidity and how insurance companies perform financially.

The results indicated that, firm's liquidity has a significant influence on the financial returns. Since the relationship was found to be positive, the study suggested that insurance companies should increase its current assets and reduce its current liabilities. A study by Almajali, Alamro, & Al-Soub (2012) suggested that a moderate liquidity is propels financial performance of firms, too much liquidity on the other hand, may do more harm than good.

2.4 Empirical Review

Very few studies have tried to determine the factors affecting the performance of investment banks; however, researches have been done of other banking sectors such as commercial banks. Ongore, (2013) carried out a study to determine the factors that affect the financial performance of commercial banks in Kenya, the results of the findings showed that factors that are directly concerned with the banks affect commercial banks,

except for a liquidity variable. Macroeconomic factors have insignificant effect on commercial banks. He concluded that board and management decisions contribute significantly on the financial performance.

Ng'ang'a (2016) in her study, established the relationship between macroeconomic variable and the financial returns of the insurance industry ok Kenya. ROCE was used as the financial performance indicator. The results showed that macroeconomic factors are not suitable predictors of the financial performance of insurance industry of Kenya. Therefore, she suggested further studies to include other specific microeconomic factors.

Schertler (2003) carried on a study in Europe on determinants of financial performance of Private equity investments. He concluded that the selected macroeconomic variables are very much influential on financial performance of private equity investments. The study also showed that early stage investments are affected by institutional reputation.

Anbar & Deger (2011) carried out a study on the factors determining profitability of commercial banks in Turkey, the results of the findings indicated that ROA and ROCE as a function of banks specific and macroeconomic factors measure bank profitability. The findings too showed that on real interest rate had a significance influence on the profitability of commercial banks. The results for the finding suggested that for a bank to be profitable, need to increase bank size and non-interest income, ensuring that credit /asset ratio is at minimum.

Said & Tumin (2011) carried out a study on Performance and Financial Ratios of Commercial Banks in Malaysia and China, the findings showed that factors that

included liquidity, credit, capital, operating expenses, and the size of the commercial bank greatly influenced the financial performance of the commercial banks. It was also noted that operating ratios significantly influenced banks in china than it was in Malaysia on the other hand financial performance of china commercial banks was greatly influenced by credit and capital ratios.

Kosmidou & Pasiouras (2007) did a study that to examine the specific characteristics and the overall banking environment that would affect both domestic and foreign commercial banks profitability. The study focused on 15 EU countries that operated over the year 1995-2001. The study showed that the banks characteristics but also the financial market and the selected macroeconomic factors do not only affect both domestic and foreign banks profitability.

In Canada Shipilov (2006) studied the implications that a firm would have by specializing on a certain activity. By analysing networks within the Canadian investment banking industry, Shipilov found that both specialists and generalists performed better than banks of moderate specialization levels

Empirical studies show that many research works have been done which covered various countries in the world but no study that has been done showing the implication of corporate governance practices to financial performance of investment banking industry in Kenya.

2.5 Summary of the Literature Review and Research Gap

The research studies done reveal what strategies, procedures and measuring instruments have been found useful in investigating the effect of macroeconomic factors on financial performance of investment banks in Kenya. The literature review made it possible to familiarize with previous studies, thus facilitating interpretation of the study results. In addition, this section has pulled together, integrated and summarized what is known in the area of study. And therefore the review has analyzed and synthesized different results revealing gaps in information and areas where the research question still remain.

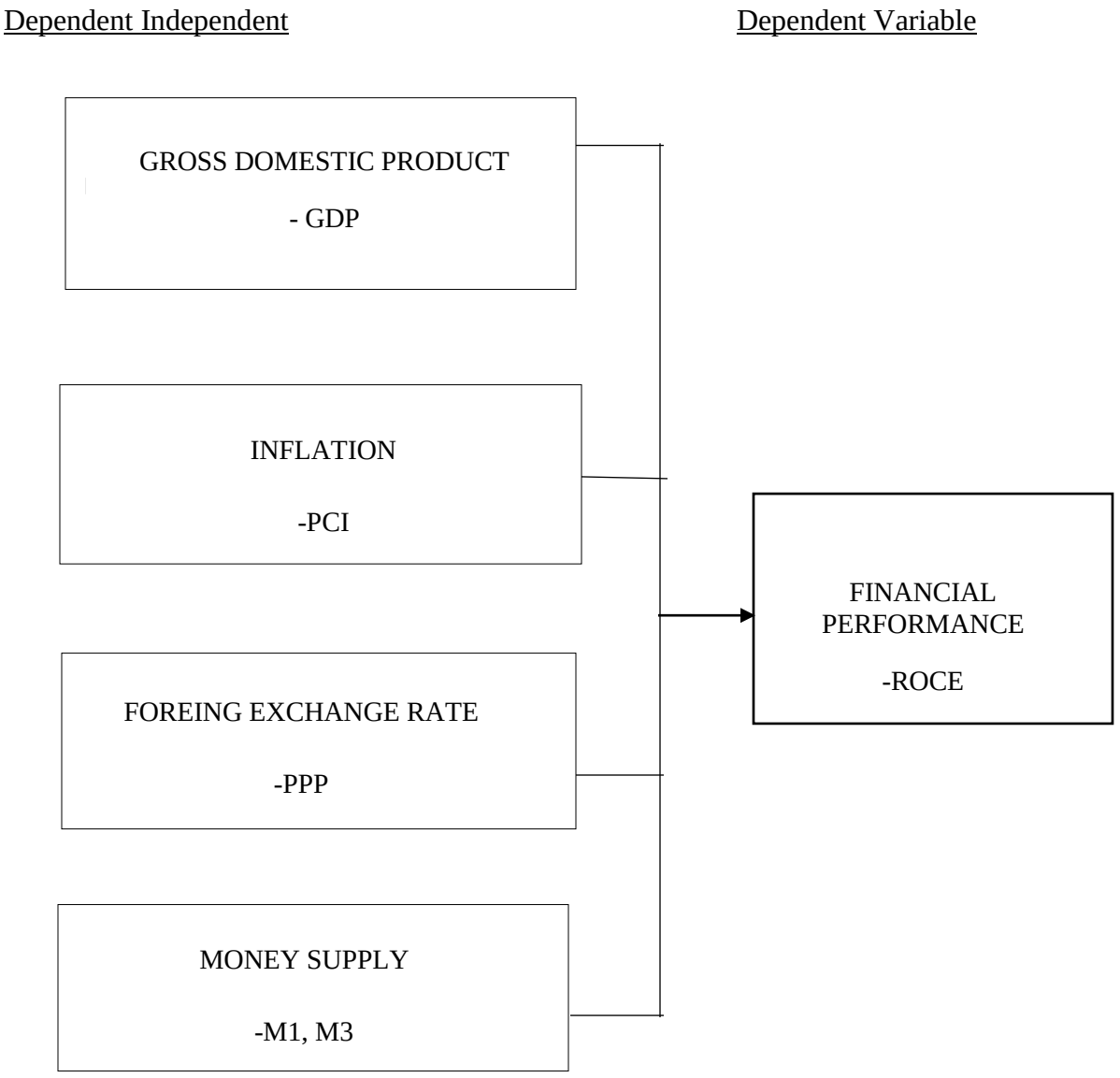
The research studies done on investment banking have heavily focused on the developed countries and use data whose investment banks are financially thriving better in the world. There is however, the need to determine effect of selected macroeconomic factors that influence financial returns of investment bank in Kenya.

Some of the research done, International Refereed Research Journal (Oct. 2011) mainly focused on commercial banks' financial performance. There is a contextual gap and hence the need for the study in investment banks.

Little is known about investment banks among the literate and the illiterate, however, much is known about commercial banks and there has been a misconception between investment banks and the commercial banks. The perception on investment banks varies among various investment groups, individuals, cultures, races and gender. Therefore, the study focuses on the macroeconomic factors and how they affect the financial performance of investment banks in Kenya.

2.6 Conceptual Framework

The Research is organized into the following independent and dependent variables. The financial performance is the dependent variable, while inflation, GDP, currency exchange rate, money supply.



Source: Researcher

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter majorly describes the methods and procedures that facilitate the study, that is; the data collection and analysis techniques including information relating to population, sampling, sample size and the research design, study population being the 24 investment banks regulated by the CMA.

3.2 Research Design

The research assumes a descriptive research design to investigate the selected macroeconomic factors that influence the financial performance of investment banks licensed by the Capital Market Authority. The design involves a set of approaches and procedures that describe the intended independent variables. It is the main research design of the research since it permits the researcher to make all-inclusive conclusions about the investigated independent variables in the target population.

Descriptive research design was defined by Creswell (1994) as that research method that collect together information about the status quo. Descriptive research gives the summary on a single factor as a percentage. The importance of a descriptive research is to ascertain already developed hypotheses referring to status quo in order to give an explanation. The results verify the developed hypothesis from the prevailing theories and the experimental studies.

3.3 Population and Sample

The population of interest for this study consists of all investment Banks in Kenya licensed by the Capital Markets Authority. Information from the Capital Markets authority website as at July 2013 indicated that there are 19 licensed investment banks in Kenya. As at now, the number of investment banks has increased to 24. The research adopted a census method this is because all investment banks were surveyed as a result no sampling was done. Secondary data was used in this study and this AS obtained from CMA database.

The variables included; Gross Domestic Product measured as the real Gross Domestic Product generated from 2002 to 2017, the inflation rate fluctuations and how it has influenced the financial performance of investment banks, the exchange rate fluctuations and how they impact on the financial performance of investment bank and lastly money supply and how it impacts on the performance of investment banks in Kenya.

3.4 Data Collection

The study chose both primary and secondary forms of data from the year 2002 to the year 2017. The secondary data on the macroeconomic factors are; consumer price index for inflation, GDP growth rate, Exchange rate (the Kenya shilling and the US dollar) the data on inflation and the GDP was obtained from KNBS. The exchange rate was obtained from the CBK. The data is however public and published in the KNBS and CBK websites. The data relating to ROCE of individual investment banks was obtained

from quarterly published financial statements. The ROCE was aggregated and the mean ROCE taken as the industry ROCE.

The collected data made inferences through a series of operations involving eradicating inconsistencies. Classification was done based on resemblance and subsequent tabulation to relate variables. Subsequently, the fine-tuned data was analyzed using descriptive statistics. Descriptive statistics is vital in describing the data in such a way to show the typical respondents and the overall pattern of responses. The study also ensured that the resulting summary from the findings present data in a consolidated and meaningful context, and thus, the study analysis only focused on accuracy and reliability in relation to the study's pre-designed objective.

3.5 Validity and Reliability

Before committing resources such as time, money, and work required for collecting actual data in this study, the researcher initially attempted to prepare the methods and ascertain validity of the selected instrument. In particular, data collection sheet drafts were given to respondents in each investment bank. Such pilot study gave an opportunity to master technical skills and first-hand experience in administering research instruments. The pilot result was expected to support to the decisions to proceed with the research investigations.

3.6 Data Analysis

The collected data was analyzed to make inferences through a series of operations involving editing to eradicate inconsistencies, classification based on resemblance and subsequent tabulation to relate variables. Subsequently, the fine-tuned data was analyzed using descriptive statistics. The data analysis also ensured that the resulting summary from the findings is consolidated to a meaningful context, and thus, the analysis focused on accuracy and reliability in relation to the study's pre-designed objective.

3.6.1 Conceptual Model

The conceptual model of the data analyze was in the form of

$Y=f(X_1, X_2, X3, X4\ X5)$, where,

Y is the financial performance expressed as the industry ROCE

X_1.is M1

X_2 is the inflation rate.

X_3 is the exchange rate against the US dollar.

$X_{4\ is}$ is the GDP growth rate.

$X_{5\ is}$ M3

3.6.2 Analytical Model

Regression model was used to illustrate the effect of selected macroeconomic factors on financial performance of investments banks in Kenya. The independent variables of the study comprise of the GDP, inflation rate and currency exchange rate, capital and the rate of money supply. The dependent variable is be the financial performance of investment banks. This is be expressed by the industry ROCE, that is, the ratio of total annual earnings and the total shareholders capital and thus the regression models appear as follows.

$$Y= \beta_{0+} \beta_1 X_{1+} \beta_2 X_{2+} \beta_3 X_{3+} \beta_4 X_{4+} \beta_5 X_{5+} \varepsilon$$

Where, Y is the financial performance expressed as the industry ROCE.

β_0 is the regression intercept term.

X_1 is M1

X_2 is the inflation rate

X_3 is the Kes exchange rate against the US dollar.

X_4 is the GDP growth rate

X_5 is M3

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are the slope coefficients for variable X_1, X_2, X_3, X_4 and X_5 respectively.

ε is the error term consisting of other unaccounted variables.

3.6.3 Measurement and Parameterization

The M1, CPI, PPP, GDP, M3 measure the independent variables X1, X2, X3, X4 and X5, respectively. The measurement was customized to quarterly and therefore this reduces the margin of error component. On the other hand, the dependent variable, financial performance was measured as the aggregate industry ROCE. Financial analysts have found ROCE to be a reliable parameter for determining the financial performance of firms.

Table 3.6.3 Variable Measurement

Variable	**Description**	**Parameter/Indicator**
Gross Domestic Product	This represents the value of all goods and services produced in a particular year in a certain country, exclusively utilizing resources of that country	✓ GDP Growth rate.
Inflation	This is the general positive change in prices of commodities in a given duration.	✓ Inflation rate ✓ CPI
Foreign Exchange Rate	This is the measure of competitiveness of	✓ PPP

	internationals	
Money Supply	This is the total stock of money circulating	✓ M1 ✓ M2 ✓ M3
Financial Performance	This is the measure of how well a firm can use assets from its primary mode of business and generate revenue.	✓ ROCE

Source: Researcher

3.6.4 Diagnostic Tests

The models validity and goodness of fit was tested by correlation coefficient (R^2) Brooks (2008) R^2 must lie between 1 and +1 by definition. Since R^2 is the squares of correlation, must lie between 0 and +1. The conclusion of the result is that, if the correlation is high i.e. close to +1, the model fits the data. On the other hand, if it is close to 0, the model does not well fit the data. The test for the coefficients β_1, β_2, β_3, β_4, β_5 is tested by the use of T-test model. The statistical significance of the results is at 95% confidence level to establish whether the model is a good predictor using an analysis of variance (ANOVA) approach. If the result of the test is within 5%, it implies that, the variables are statistically significant in establishing the influence macroeconomic factors have on financial performance of investment banks in Kenya.

3.7 Summary and Conclusion

The study used descriptive statistics and to establish the effect of macroeconomic factors on the financial performance of investment banks in Kenya. Linear regression was carried out to test the influence of the variables on the financial performance of investment banks regulated by the CMA. The model was tested for statistical significance at a level of significance of 95%.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter analyzes data as set out in the research methodology, and give findings of the study. The study was geared at determining the effect of macroeconomic factors on financial performance of investment banks in Kenya. After the analysis, the results were tabulated graphically and presented as in the sections below. Each section has also discussed the findings, majorly on the macroeconomic factors and the effect each variable has towards the Return on Capital Employed of Investment banks in Kenya. The main sections of this chapter are data analysis and presentation, trend of analysis, correlation analysis and analysis of variance.

4.2 Summary of Statistics

Quarterly data was collected from the year 2002 to 2017 the 2nd quarter. The secondary data was obtained from the KNBS website and the CBK website. It was organized into excel spreadsheets as it is shown in the appendices. Later the data was analyzed using the SPSS software, which gave the findings to the study. This section majorly presents the descriptive statistics which is the raw secondary data that was analyzed, measures of central tendency which is the mean for all variables, the trend of analysis for all variables, both dependent and independent.

Table 4.2 Summary of statistics

Variable	Obs	Mean	Std D	Min	Max
Inflation	62	8.29	4.50	1.775836689	18.96
CPI	62	108.70	38.93	51.98	185.39
Exchange rate	62	82.23	10.82	62.54	105.29
GDP Growth rate	62	4.76	2.42	-2.5	8.40
M1	62	547,551.75	346,641.59	125,313.62	1,394,321.00
M2	62	1,102,612.71	686,122.84	320,948.26	2,484,654.00
M3	62	1,295,561.94	812,310.58	365507.83	2,935,261.00
Industry ROCE	62	8.45	4.46	2.00	23.00

Source: Research findings

The analysis in table 4.2 shows the descriptive statistics of the study. From the analysis, it is clear that the industry ROCE has a mean of 8.45 and a standard deviation of 4.46. Inflation has a mean of 8.29 and a standard deviation of 4.50. Consumer price index has a mean of 108.70 and a standard deviation of 38.93. Exchange rate has a mean of 82.23 and a standard deviation of 10.82. GDP Growth rate has a mean of 4.76 and a standard deviation of 2.42. M1 has a mean of 547,551.75 and a standard deviation of 346, 6410.59. M2 has a mean of 1,102,612.71 and a standard deviation of 686,122.84, and finally M3 has a mean of 1,295,562.94 and a standard deviation of 812,310.58.

4.3 Results of Diagnostic tests

Using significance level of 5% any independent variable with a P-value of less than 5% is statistically significant and any that is more than 5% is insignificantly important. The study regressed the dependent variable, return on capital employed against five independent variables. Quarterly inflation rate, quarterly GDP Rate, quarterly M1, quarterly M3 and quarterly exchange rate. The regression analysis was set at 95% confidence level, which was based on a P- value.

The criteria of determining the significance of the independent variables, a comparison between the P-values of each variable and p=0.05 was done. A P-value of less than 0.05 meant that the independent variable is statistically significant to the financial performance indicator. Otherwise, it is not. In this case, GDP Growth rate is the only variable that significantly affect performance of investment banks in Kenya. Where else inflation rate, currency exchange rate, M1 and M3 do not significantly affect performance of investment banks in Kenya,

The table below shows that R^2 =38.38%. The R^2 value indicates that change in the independent variable is explained by 38.38% of the dependent variable under the study. The results indicate that the independent variables do not contribute largely towards the performance of investment banks in Kenya. The main factors that contribute towards the financial performance of investment banks are therefore other microeconomic factors within the industry such as size of the firm, capital base, liquidity and leverage.

Table 4.3 Model Summary

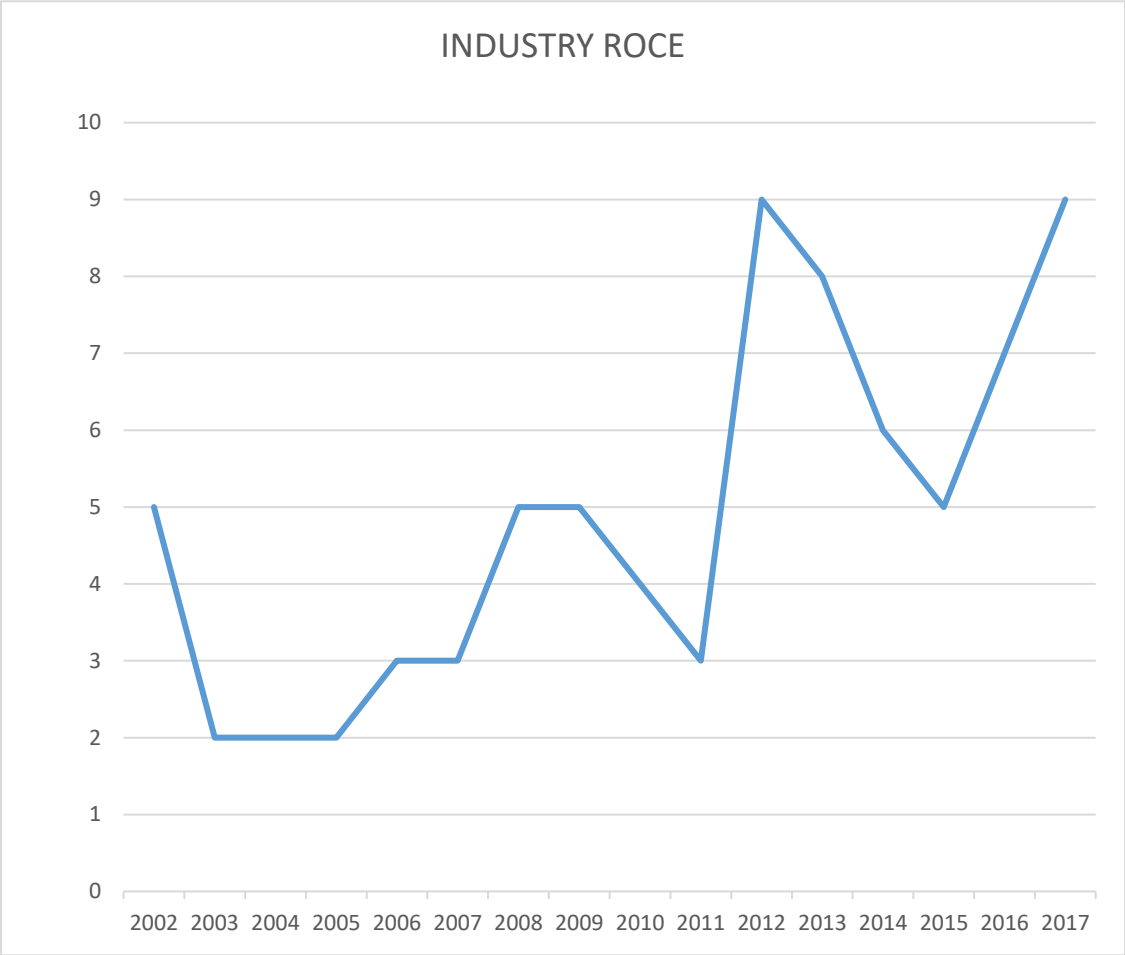
Number of observations	62
R- Squared	0.38376
Adjusted R-Squared	0.2319

Source: Research findings

4.4 Results of Data Analysis

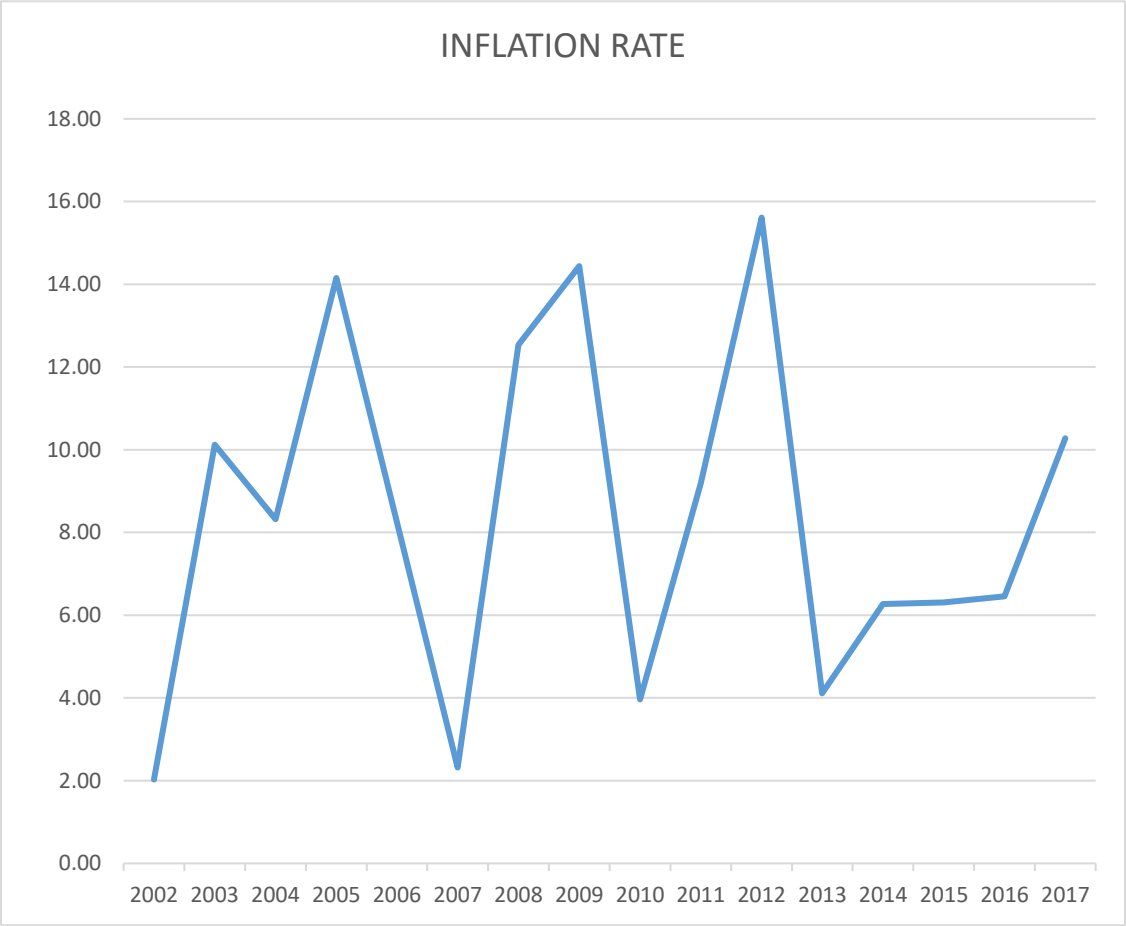
The data analysis was aimed at determining the trend of how investment banks have been performing financially over the years and how the independent variables have changed over the period of study. The study focus was from the year 2002 to 2017. The trend analysis is depicted by figure 4.4.1 to figures 4.4.7 as shown below. Data analysis was also aimed at giving the correlation of the independent variables to the dependent variable.

Figure 4.4.1 Average Industry ROCE



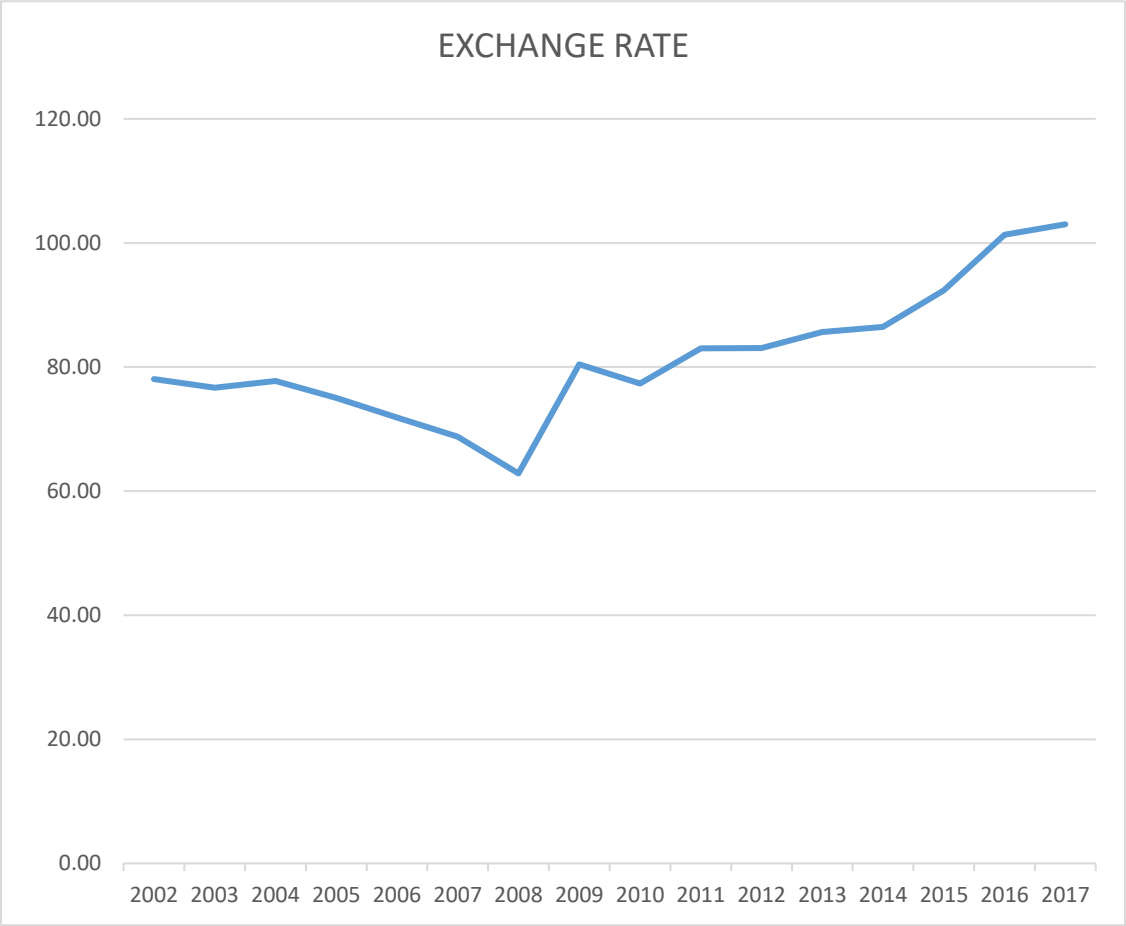
The average performance of the industry as indicated by ROCE in the period of study is 8.5; the study also clearly showed that ROCE was at the peak in the year 2012 and the lowest performance in 2003/2004. From the diagram, it is clear that the industry ROCE has been fluctuating over the period.

Figure 4.4.2 Average Inflation Trend



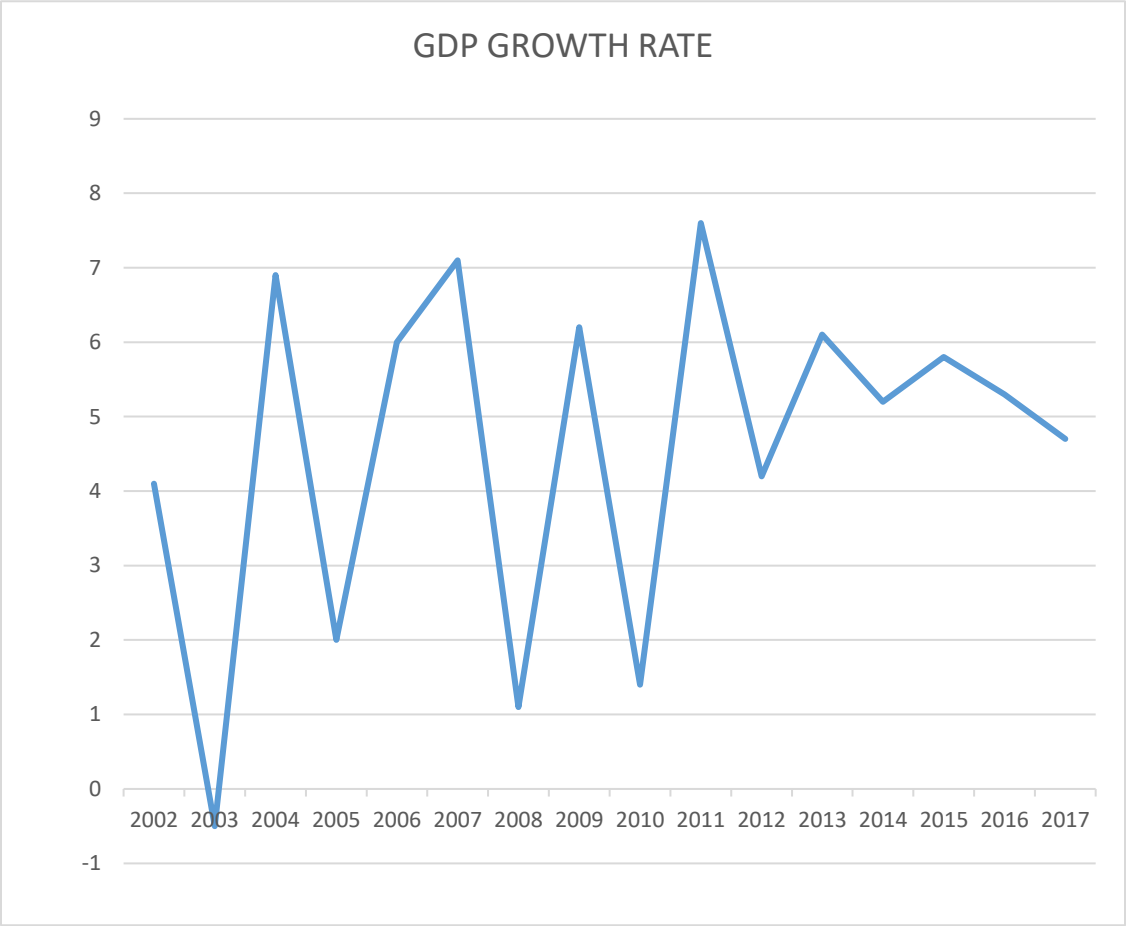
Throughout the study period, the inflation rate has averaged at 8%. Ideally, throughout the period the inflation rate has fluctuated much. Recording its highest interest rate of 15.8% in the year 2012 and the minimum interest rate of 2% in the year 2002.after the highest hit of inflation rate ,the rate gradually fluctuated by decreasing and increasing.

Figure 4.4.3 Average Exchange Rate



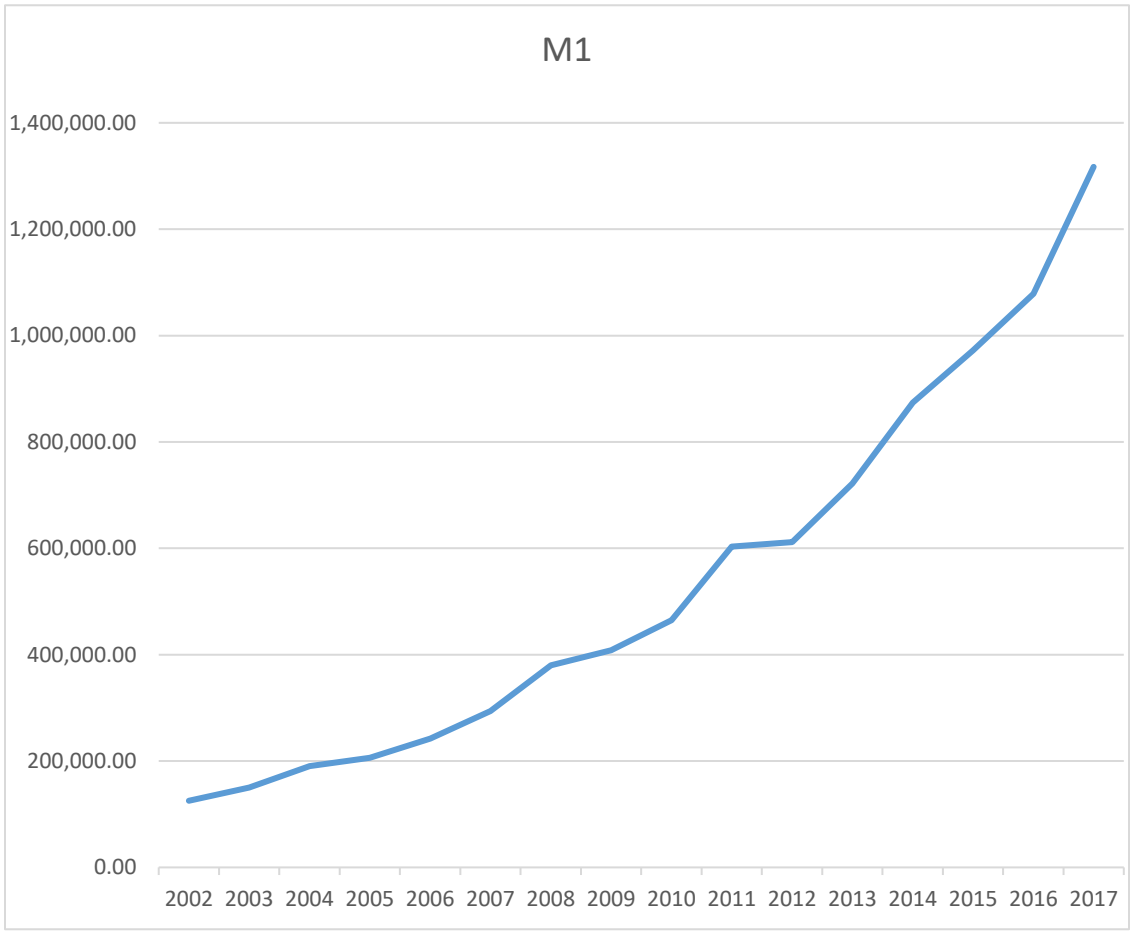
Throughout the period, the average exchange rate has been 82.23 (KES/USD). There has been a general gradual increase in the exchange rate. This is with the exemption of the year 2004/2005 where the Kes appreciated by 6 points from 81 Kes to Kes 75.00 .2006/2007 the Kes again appreciated by 10 points from Kes 72.00 to Kes 62.00 and the year 20015/20016 where the Kes appreciated by 4 points from 105.00 Kes to Kes 101.00.

Figure 4.4.4 Average GDP Growth Rate



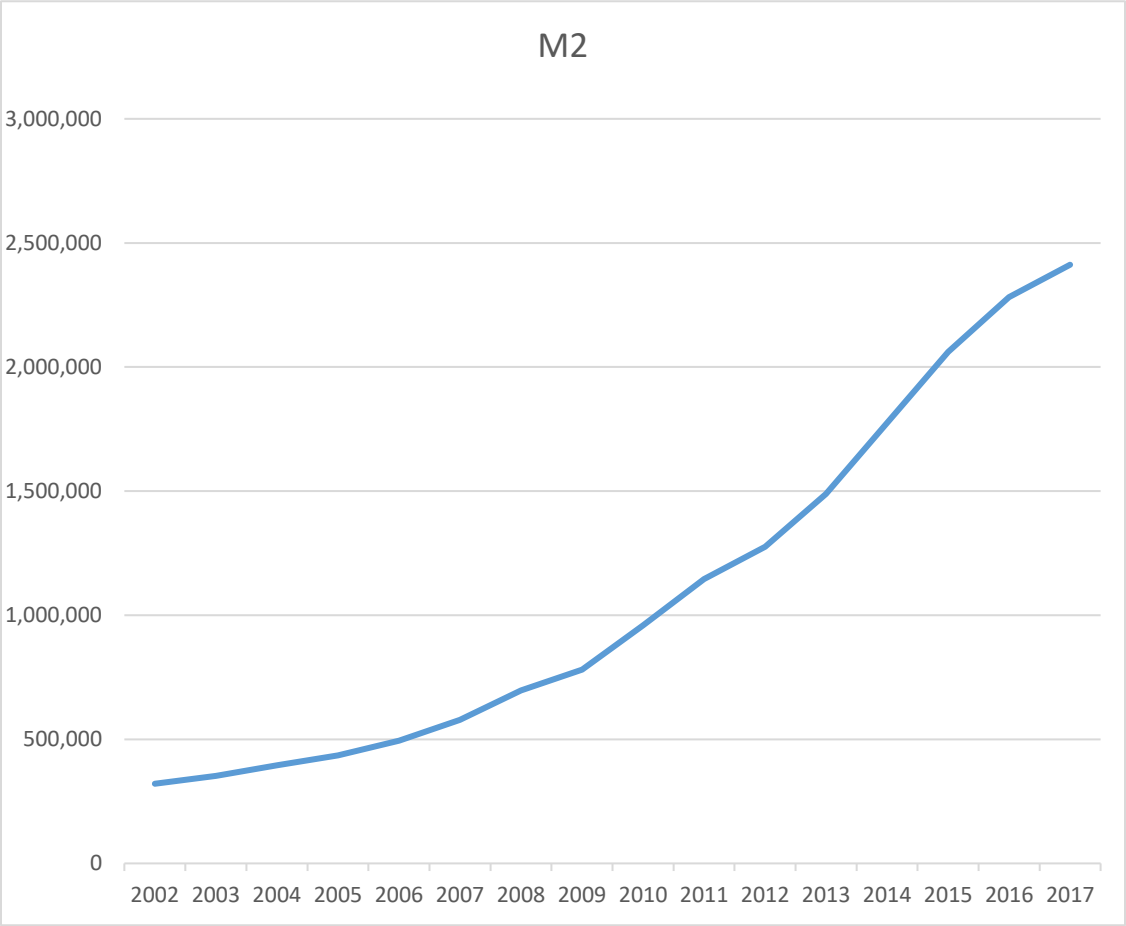
The study showed that GDP has grown each year though at different rates.in 2005 the GDP growth rate recorded a maximum of 8.4% while in 2002, a minimum of 0.2%. During the third and first quarters of 2002 and 2003 respectively, the GDP was recorded at -2.5% and -0.5% respectively.

Figure 4.4.5 Average M1



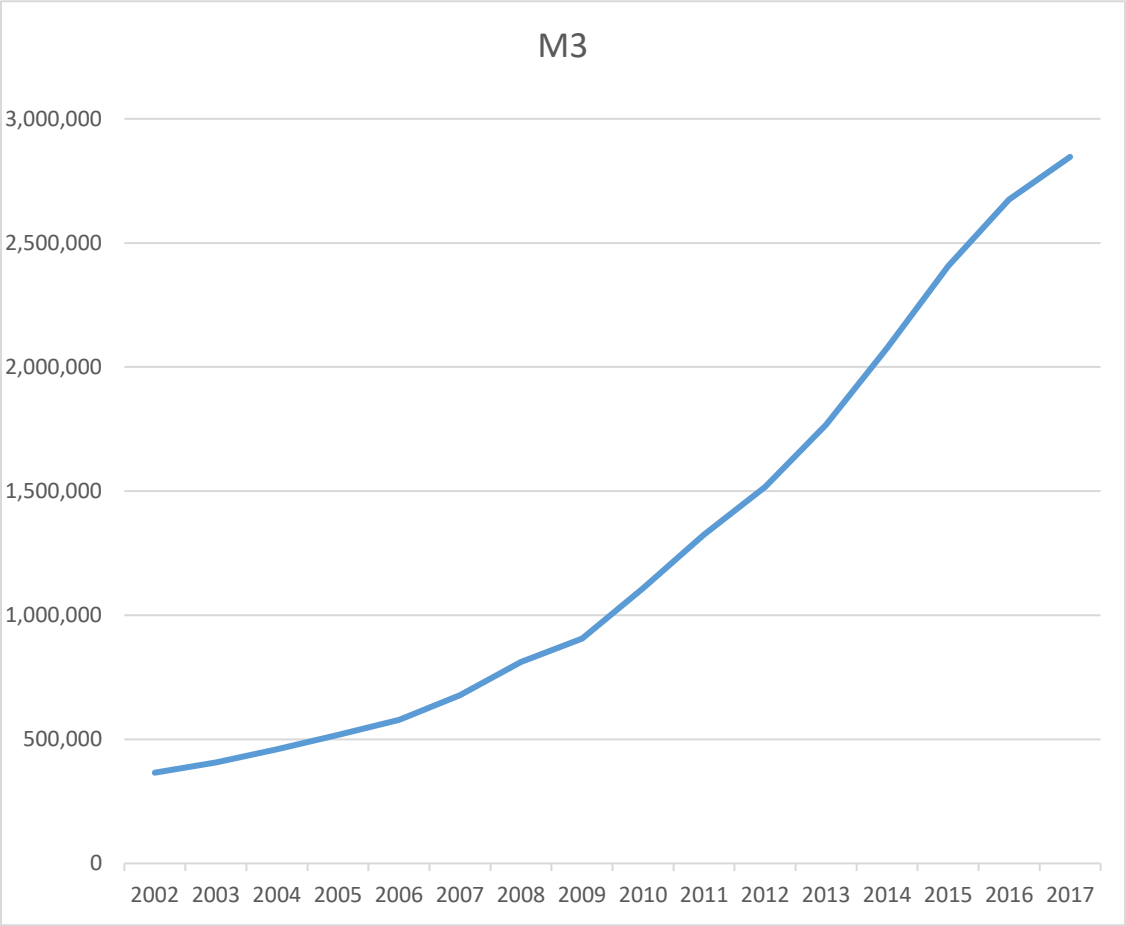
The study showed that M1 increased over the period of study. M1 averaged at 547,551.75.A maximum is recorded at the last quarter of the period of study which is at 1,394,321.00, and a minimum at the beginning of the first quarter of the period of study which is 125,313.62.It is expected that M1 will keep on increasing at an increasing rate in the foreseeable future.

Figure 4.4.6 Average M2



The study showed that M2 increased over the period of study. M2 averaged at 1,102,612.71.A maximum is recorded at the last quarter of the period of study which is at 2,484,654.00, and a minimum at the beginning of the first quarter of the period of study which is 320,948.26.It is expected that M2 will keep on increasing at an increasing rate in the foreseeable future.

Figure 4.4.7 Average M3



The study showed that M3 increased over the period of study. M3 averaged at 1,295,561.94.A maximum is recorded at the last quarter of the period of study which is at 2,935,261.00, and a minimum at the beginning of the first quarter of the period of study which is 365507.83.It is expected that M3 will keep on increasing at an increasing rate in the foreseeable future.

The correlation analysis was used to determine the relationship between the dependent and the independent variables.

Table 4.4 Correlation Analysis Matrix

	M1	Inflation rate	Exchange rate	GDP Growth rate	M3	Industry ROCE
M1	1.0000					
Inflation rate	-0.0834	1.0000				
Exchange rate	0.8494	-0.0255	1.0000			
GDP Growth Rate	0.1885	-0.2237	0.1914	1.0000		
M3	0.7933	-0.0997	0.0669	-0.0672	1.0000	
Industry ROCE	0.0332	-0.0342	-0.0415	-0.2371	0.0407	1.0000
P Values	0.9229	0.0929	0.3832	0.0264	0.4801	

Source: Research findings

The table above shows the correlation of the dependent variable (ROCE) and each of the independent variable. M1 is measured by the CBK and is determined by the currency held outside the banking system and the current account deposit liabilities of commercial banks held for transactive purposes. M1 has a positive effect on the return on capital employed. $\rho=0.0332$ which is in the range of $0\leq \rho\leq 1$. Inflation rate has a negative

correlation with return on capital employed ρ = -0.0342 which is in the range of -1$\leq \rho \leq$ 0. Exchange rate has negative correlation with return on capital employed ρ =-0.0415 which is in the range of -1$\leq \rho \leq$ 0. GDP Growth rate has negative correlation with return on capital employed ρ =-0.2371 which is in the range of -1$\leq \rho \leq$ 0. M3 has a positive effect on the return on capital employed. ρ =0.0407 which is in the range of 0$\leq \rho \leq$1.

M1 has a negative correlation with inflation rate. ρ =-0.0834, which is in the range of -1$\leq \rho \leq$ 0.M1 has a positive correlation with exchange rate, ρ =0.8494, which is in the range of 0$\leq \rho \leq$1. M1 has a positive correlation with GDP growth rate. ρ =0.1885, which is in the range of 0$\leq \rho \leq$1. M1 has a positive correlation with inflation rate. ρ =0.7933 which is in the range of 0$\leq \rho \leq$1.

Inflation rate has a negative correlation with exchange rate. ρ =-0.0255, which is in the range of -1$\leq \rho \leq$ 0. Inflation rate has a negative correlation with GDP Growth rate, ρ =-0.2237, which is in the range of -1$\leq \rho \leq$ 0. Inflation rate has a negative correlation with M3. ρ =-0.0997, which is in the range of -1$\leq \rho \leq$ 0. Exchange rate has a positive correlation with GDP Growth rate. ρ =0.1914, which is in the range of 0$\leq \rho \leq$1. Exchange rate has a positive correlation with M3, ρ =0.0669 which is in the range of 0$\leq \rho \leq$1, GDP Growth rate has a negative correlation with M3, ρ =-0.0672, which is in the range of -1$\leq \rho \leq$ 0.

By positive effect it means, a change in the independent variable will have positive change in ROCE, on the other hand, by negative effect it means, a unit change in the independent variable will have negative change in ROCE.

4.4.1 Results of Model Goodness of Fit

The analysis found that GDP growth rate had a P- value of (0.0263<0.05) which is statistically significant, while exchange rate (0.3831>0.05), inflation rate (0.0928>0.05), M1 (0.9224>0.05) and M3 (0.4800>0.05) are statistically insignificant. Therefore, interest rates, exchange rates and money supply are not suitable predictors of the investment bank's financial performance.

The model with all variables was statistically significant, 0.02106<0.05. This confirms that the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables influences investment banks financial performance. GDP was statistically significant while the other variables were statistically insignificant.

4.4.2 Results of ANOVA

Table 4.4.2 ANOVA

Source	SS	DF	MS	F(7, 54) F= 0.3214(tabulated) F=1.03(calculated) P-value =0.02106
Model	4547.749	7	649.67	
Residual	1091.250	54	20.20	
Total	5639	61	669.88	

Source: Research findings

At 5% significance level the ANOVA results show that, the calculated F ratio is 1.03, which is greater than the table value, and hence the model is significant in determining the return on capital employed of investment banks in Kenya. Also, since p is less than 0.05 we also conclude that the model is significant in determining the financial performance of investment banks in Kenya.

4.4.3 Estimated Model

The regression analysis model was in the form of:

$$Y= \beta_{0+} \beta_1 X_{1+} \beta_2 X_{2+} \beta_3 X_{3+} \beta_4 X_{4+} \beta_5 X_{5+} \varepsilon$$

X_1 is M1, X_2 inflation rate, X_3 is exchange rate,X_4 is GDP Growth rate and X_5 is M3; This means that, a unit change in X_1 will have a positive change of 0.000 in the ROCE, A unit change in X_2 will have a negative change of 0.273 in ROCE, A unit change in X_3 will have positive change of 0.213in ROCE. A unit change in X_4 will have a negative change of 0.586 in ROCE and finally a unit change of X_5 will have a negative change of 0.000 in ROCE. If all variables are held constant, the ROCE will be 16.526.

Table 4.4.3 Model Coefficients

Industry ROCE	Coefficients	Standard Error	T	P-value	95% Confidence level Intervals	
M1	0.000	0.000	-0.098	0.922	-0.000	0.000
Inflation rate	-0.273	0.160	-1.711	0.093	-0.593	0.047
Exchange rate	0.212	0.0532	0.879	0.383	-0.060	0.153
GDP Growth rate	-0.586	0.257	-2.283	0.026	-1.101	-0.071
M3	0.000	0.000	0.711	0.480	-0.000	0.000
Constant	16.526					
S. Error	4.4959					

Source: Research findings

4.5 Discussion

From the results obtained above is clear that the average performance of the investment banks industry in Kenya is 165.2586 units when other factors are held constant. At 5% significance level the model is statistically significant with a P-value of 0.02126 which is less than 0.05 ($p= 0.02126$, $p<0.05$). It is very important also, to note that not all variables are statistically significant, for instance, GDP is statistically significant since p

is less than 0.05, on the other hand inflation rate, exchange rate, M1 and M3 are statistically insignificant towards the Return on capital employed of investment banks in Kenya.

The results further show that inflation rate has a negative relationship with return on capital employed, meaning that a unit increase in inflation rate will lead to a decrease in return on investment. On the other hand, M1and M3 have a positive relationship with return on capital-employed meaning that a unit increase in each of the variable will lead to an increase in return on capital employed.

4.6 Summary

The study found that GDP growth rate had a P-value of (0.0263<0.05) which is statistically significant while exchange rate had a P-value of (0.3831>0.05), inflation rate had a P-value of (0.0928>0.05), M1 had a P-value of (0.9224>0.05) and M3 had a P-value of (0.4800>0.05). These P-values are greater than 0.05 and therefore statistically insignificant; hence, interest rates, exchange rates and money supply are not suitable predictors of the investment bank's financial performance.

M1 has a positive effect on the return on capital employed. Inflation rate has a negative correlation with return on capital employed. Exchange rate has negative correlation with return on capital employed. GDP Growth rate has negative correlation with return on capital employed. M3 has a positive effect on the return on capital. M1 has a negative correlation with inflation rate. M1 has a positive correlation with exchange rate. M1 has a positive correlation with GDP growth rate. M1 has a positive correlation with inflation

rate. Inflation rate has a negative correlation with exchange rate. Inflation rate has a negative correlation with GDP Growth rate. Inflation rate has a negative correlation with M3. Exchange rate has a positive correlation with GDP Growth rate. Exchange rate has a positive correlation with M3. GDP Growth rate has a negative correlation with M3.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter will give the summary of the results of the data analysis, conclusion of the study and recommendation in line with the objective of the study. It will provide a discussion on the conclusions arrived at by the data analysis. The discussions will give conclusive statistical evidence on the variables in the study. In this case the independent variables will either signicantly or insignificantly affect the dependent variable. The results of the study will conclusively answer the research question of, what is the effect of macroeconomic factors on the financial performance of investment banks in Kenya. The recommendations are too in line with the study's main objective, which is to determine the effect of macroeconomic factors on the financial performance of investment banks in Kenya.

5.2 Summary of Key Findings

This study's objective was to determine the effect of macroeconomic factors on financial performance of investment banks in Kenya. The study followed a descriptive research design and used secondary data on quarterly return on capital employed for the industry, inflation rate as computed by CPI, exchange rate (Ksh/USD), quarterly GDP growth rate M1 and M3. The data sets covered the period 2002-2017. The data was summarized and analyzed using excel spreadsheets and SPSS. The findings were

summarized in graphs and tables. A regression analysis was run on SPSS in order to establish various inferential statistics: co-efficient of determination, P-value, F-test statistics and summary statistics.

These statistics were used to establish the relationship and the significance of the model. The study summarized the trend of the individual variables across the study period. The study results as depicted in chapter 4 shows that the performance of investment banks has had many fluctuations with its peak in 2009 at 23% and the lowest point in 2002 at 2 %. Inflation has experienced fluctuations throughout the study period, the inflation rate averaged at 8%. Ideally, throughout the period the inflation rate has fluctuated much. Recording its highest inflation rate of 18% in the year 2011 and the minimum inflation rate of 2% in the year 2002. After the highest hit of inflation rate, the rate gradually fluctuated by decreasing and increasing. The study showed that GDP has grown each year though at different rates. In 2005 the GDP growth rate recorded a maximum of 8.4% while in 2002, a minimum of 0.2%. During the third and first quarters of 2002 and 2003 respectively, the GDP was recorded at -2.5% and -0.5% respectively.

It is worth noting that the study period covers two election years, 2007, and 2013. These two and overflowing to the next periods (2008 &2014) saw the adverse turn up in the variables under study including the dependent variable under study- ROCE. In the results of the data analysis obtained and presented, the findings showed an R-squared of 38% implying that GDP growth rate, inflation rate, exchange rates and money supply are not the major determinant of the return on capital employed for the investment banks in

Kenya. This implies that the variables under study explain only 38% of the changes in the ROCE. The other 62% is explained by micro-economic factors and industry specific factors like size of the firm, capital base, liquidity, leverage and management structure.

The analysis of the specific variables showed that money supply has positive effect on the return on capital employed of the insurance industry, while GDP growth rates, exchange rate and inflation has a negative relationship with ROCE. This illustrates that; an increase in this variable will have a negative effect on the financial performance of the investment banks. It is important to note that the variables together are statistically significant but individually, are statistically insignificant with the exception of GDP.

5.3 Conclusion

The analysis results as depicted by R^2 established that the macro economic variables under study explain only 38% of the industry ROCE. The coefficients corresponding to selected macroeconomic variables; money supply had positive correlation with ROCE while the inflation rate, GDP growth rates, exchange rate had negative correlation. The model with all variables was statistically significant, $0.02106<0.05$. This confirms that the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables influences investment banks financial performance. GDP was statistically significant while the other variables were statistically insignificant.

There exists a significant and negative correlation between return on capital employed and GDP $p= 0.0263$ which is less than 5% significance level, $p<0.05$. Inflation has

insignificant negative effect on Return on capital employed p= 0.0928, p>0.05). Exchange rates have an insignificant negative relationship with Return on capital employed, p= 0.3831, p>0.05. M1 has an insignificant positive correlation with return on capital employed p= 0.922. M3 has an insignificant positive correlation with return on capital employed p= 0.4800, p>0.05.

5.4 Recommendations for Policy

One recommendation that the study gives is that the CBK has to come with ways that will decrease inflation rate in the economy. Low inflation rates will encourage more people to invest hence improve the financial performance of investment banks in Kenya. Key to note is that the two are negatively correlated with each other. High inflation leads decreased performance of investment banks in Kenya. The CBK should also monitor the exchange rates since depreciating the local currency will cause decrease in performance of investment banks in Kenya. The government should come up with measures to grow the country's real GDP, as this would enhance the economy's growth and the investment banks performance will grow as well. In addition, the study established that all the selected macroeconomic factors.

The cost of undertaking the entire research was also a challenge. Completing the research study was very costly, which included printing and binding each draft of the project, transport fees to gather data, internet costs among others and the course fees. To sufficiently determine the effect of macroeconomic factors on financial performance of Investment Banks in Kenya, several factors from different aspects and dimensions

including microeconomic variables need to be thoroughly studied. The study depended on a small number of macroeconomic factors did not sufficiently provide the expected results. The regression model was also quite technical to carry out.

The study recommends that the industry should plan for such adverse effects. The government should ensure that security and peace prevails in the country especially during and after general elections since lack of the two leads to deteriorating GDP, high inflation and depreciating of the local currency. These factors will negatively affect the economy as well as in investment banks performance. The study recommends that the industry should plan for such adverse effects. The government should ensure that security and peace prevails in the country especially during and after general elections since lack of the two leads to deteriorating GDP, high inflation and depreciating of the local currency. These factors will negatively affect the economy as well as in investment banks performance.

5.5 Limitations of the Study

The first challenge the researcher faced was the time limitation aspect. Future researchers need to allocate a lot of time to gather sufficient data on the study topic in order to do a comprehensive and conclusive research study. Getting some of the investment banks data that is not available on the internet consumed much time. Another challenge was the fatigue and long working hours that the researcher experienced due to undertaking the project within the limited time period. Researchers who are intending to do a similar research in future should consider allocating more time to the topic in order to avoid straining.

Another key challenge was the lack of credibility and reliability of the data. Secondary data is information that has been collected by individuals who are prone to error and bias. This study relied entirely on secondary data to do the analysis. To sufficiently determine the factors that affect performance of investment banks, several factors from different aspects and dimensions including microeconomic variables need to be thoroughly studied. The study depended on a small number of macroeconomic variables leading to a model to that did not sufficiently provide the expected results. The regression model was also quite technical to carry out.

5.6 Suggestions for Further Study

Future research studies seeking to establish the effect of macroeconomic on financial performance of investment banks in Kenya should focus on how management actions and/or customer services experience affect the performance of the investment banks. This can reveal more determinants of financial performance that should be of great concern for improved performance in the investment banks in Kenya.

Similar studies can be done on other sectors in the economy and not just investment banks, investigating on what industry specific, firm specific or macroeconomic factors affect the financial performance. This research studied fifteen years, quarterly, a period of study, which though helpful, may not be quite adequate to make complete and conclusive results, future studies should consider a longer period. The researcher also recommends that further studies on the effects of macroeconomic variables be undertaken alongside industry specific factors and that they should be studied for a longer period in order to reveal more conclusive information about the relationship.

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APPENDICES

Appendix I: List of Investment Banks in Kenya

There are 24 licensed and regulated Investment Banks in Kenya as listed below.

1. ABC Capital Ltd	2. KCB Capital
3. African Alliance Securities	4. Kestrel Capital (EA) Ltd
5. AIB Capital Ltd	6. Kingdom Securities Ltd
7. ApexAfrica Capital Ltd	8. Ngenye Kariuki & Co. Ltd
9. Barclays Financial Services Ltd	10. NIC Securities Ltd
11. CBA Capital Ltd	12. Old Mutual Securities Ltd
13. Dyer & Blair investment bank Ltd	14. Renaissance Capital (Kenya) Ltd
15. EFG Hermes Kenya Ltd	16. SBG Securities Ltd
17. Equity investment Bank Ltd	18. Securities Africa Kenya Ltd
19. Faida investment Bank Ltd	20. Standard Investment Bank Ltd
21. Francis Drummond & Company Ltd	22. Sterling Capital
23. Genghis Capital Ltd	24. Suntra Investment Bank Ltd

Source: CMA Website

Appendix II: Raw Data for the Study

		M1	M2	M3	INFLATION	CPI	EXCHANGE	GDP	INDUSTRY
YEAR	QUARTER				(%)		RATE (%)	(%)	ROCE (%)
2002	Q1	125,313.62	320,948.26	365,507.83	2.03	51.98	78.058	4.1	5
	Q2	136,843.86	331,632.44	378,127.91	2.85	54.47	78.786	0.2	10
	Q3	136,078.09	335,873.64	387,366.01	1.78	54.55	79.026	-2.5	15
	Q4	150,103.10	350,754.66	404,805.47	4.25	55.63	77.072	0.5	11
2003	Q1	149,822.68	352,747.09	407,147.23	10.12	57.24	76.646	-0.5	2
	Q2	157,432.75	362,594.97	415,784.02	13.74	61.96	74.167	0.4	5
	Q3	179,899.62	370,335.09	424,270.82	7.89	58.85	78.417	6.5	7
	Q4	193,855.30	395,116.04	451,171.95	8.35	60.28	76.139	5.2	10
2004	Q1	190,355.54	394,787.66	459,269.83	8.32	62.00	77.762	6.9	2
	Q2	198,059.50	407,301.63	473,793.10	5.94	65.64	79.513	5	4
	Q3	200,371.22	416,954.18	488,290.11	18.96	70.02	81.114	3.2	6
	Q4	210,598.22	432,566.82	511,425.22	17.08	70.57	77.3444	5.3	9
2005	Q1	206,192.57	434,913.45	517,969.95	14.15	70.78	75.0167	2	2
	Q2	221,928.56	442,402.45	523,715.53	11.92	73.46	76.2056	7.3	5
	Q3	220,847.30	453,770.12	538,230.59	4.27	73.00	74.0778	8.4	7
	Q4	231,155.56	474,882.93	558,163.65	4.91	74.04	72.3667	5.9	11
2006	Q1	242,304	494,431	578,705.81	8.26	76.62	71.8722	6	3
	Q2	258,426	523,642	605,238.15	4.06	76.44	73.88	6.2	5
	Q3	267,218	539,252	630,379.24	5.79	77.23	72.679	8.2	9
	Q4	291,789	555,725	653,035.99	7.32	79.46	69.397	4.9	17
2007	Q1	293,928	577,903	677,349.05	2.31	78.40	68.781	7.1	3

	Q2	338,825	605,550	708,392.38	4.05	79.53	66.564	8.3	8
	Q3	349,774	631,141	733,329.29	5.45	81.43	66.971	6.3	11
	Q4	373,310	666,875	777,595.81	5.60	83.91	62.541	6.4	13
2008	Q1	380,141	697,142	811,214.13	12.53	88.22	62.8478	1.1	5
	Q2	391,823.51	715,968.37	840,679.44	16.79	92.89	64.6944	2.2	8
	Q3	385,003.53	736,325.15	859,327.98	16.32	94.72	73.2189	2.6	12
	Q4	392,778.43	766,393.12	901,054.96	15.48	96.89	77.7111	0.2	19
2009	Q1	408,327.06	780,512.72	906,066.71	14.44	100.96	80.4306	6.2	5
	Q2	400,653.42	812,055.13	950,239.20	9.86	102.05	77.1578	1.9	8
	Q3	433,353.60	849,209.46	986,900.85	9.19	103.42	74.9994	1.9	19
	Q4	442,245.11	898,099.44	1,045,656.74	8.02	104.66	75.82	1.2	23
2010	Q1	465,082.38	959,004.53	1,107,895.76	3.97	104.97	77.3314	1.4	4
	Q2	511,583.64	1,033,703.68	1,198,930.16	3.49	105.61	81.9167	6.1	10
	Q3	536,885.39	1,078,277.30	1,243,600.87	3.21	106.74	80.7781	7.2	11
	Q4	577,205.86	1,099,234.13	1,271,638.35	4.51	109.38	80.7519	8.3	16
2011	Q1	603,413.82	1,145,002.95	1,324,684.69	9.19	114.62	82.9889	7.6	3
	Q2	620,131.95	1,183,864.26	1,380,732.08	14.48	120.91	89.8639	6.7	6
	Q3	627,711.00	1,232,807.31	1,484,197.99	17.32	125.23	99.8319	5.8	6
	Q4	622,731.31	1,253,958.28	1,514,151.67	18.93	130.09	85.0681	4.4	11
2012	Q1	611,780.09	1,276,402.73	1,517,125.83	15.61	132.51	83.0556	4.2	9
	Q2	623,803.86	1,339,470.15	1,595,058.71	10.05	133.06	84.2333	4.3	7
	Q3	667,528.20	1,409,820.99	1,671,317.66	5.32	131.89	85.2833	5	10
	Q4	710,883.84	1,469,399.20	1,727,685.75	3.20	134.25	86.0286	4.7	4
2013	Q1	721,977.61	1,488,025.99	1,766,903.52	4.11	137.96	85.6386	6.1	8
	Q2	760,597.26	1,565,359.08	1,837,028.92	4.91	139.59	86.0075	7.5	3
	Q3	811,302.26	1,636,528.57	1,904,268.68	8.29	142.82	86.6458	6.4	6
	Q4	831,873.88	1,683,158.65	2,007,328.74	7.15	143.85	86.3097	3.5	11
2014	Q1	874,034.91	1,775,280.48	2,075,903.52	6.27	146.61	86.4414	5.2	6

	Q2	914,436.41	1,850,585.63	2,163,037.69	7.39	149.91	87.6269	6	9
	Q3	904,796.17	1,907,150.30	2,262,861.69	6.60	152.24	89.2794	4.6	13
	Q4	938,157.18	1,996,315.89	2,336,390.91	6.02	152.51	90.5978	5.6	6
2015	Q1	972,150.63	2,060,438.01	2,406,465.03	6.31	155.86	92.335	5.8	5
	Q2	1,001,945.26	2,154,507.21	2,560,420.44	7.03	160.46	98.6394	5.6	8
	Q3	981,970.48	2,150,996.70	2,567,111.32	5.97	161.33	105.2928	6.1	12
	Q4	1,023,047.15	2,252,750.46	2,666,700.93	8.01	164.72	102.3114	5.5	15
2016	Q1	1,078,361	2,281,572	2,675,129.10	6.45	165.92	101.334	5.3	7
	Q2	1,135,921	2,353,413	2,769,007.15	5.80	169.76	101.102	6.3	8
	Q3	1,238,618	2,340,196	2,772,656.63	6.34	171.56	101.262	5.7	11
	Q4	1,310,016	2,360,202	2,764,506.77	6.35	175.18	102.4858	6.1	3
2017	Q1	1,317,184	2,412,103	2,846,634	10.28	182.98	103	4.7	9
	Q2	1,394321	2,484,654	2,935,261	9.21	185.39	103.68	5	8

Source: NBK, KNBS & CMA Websites