

## Effect of Interest Rates on Business Investment Performance of Selected Commercial Banks in Kisii Town, Kisii County, Kenya

Wycliffe Otera Maranga and Emmanuel Nyambane Nyakundi\*

Mount Kenya University School of Business and Public Management, KISII, Kenya

### Abstract

Investors borrow money from banks and other financial institutions. The response of investment expenses changes keenly with interest rate which is at the mind of money-making analysis. Interest rates is the other strong factors that affect financial policies as well as weaker financial payments in guiding principles of investors, it facilitate investment if the high interest rate is applicable on savings. Interest rate influences savings practically all commercial banks commencing macroeconomic theories. The negative influence of higher investment rate inhibits the macroeconomic effect of interest rate policy. Interest rate is the money charged on loan of money. Investors borrow money from banks for investment. As a result of this encouragement, the bank lenders are competent to attain repayment of each and every loan by means of high prospect. As soon as it comes in the direction of mortgage contracts (if a borrower discards mortgage repayment), the loan official once more plays the central role by means of warning as well as if necessary authorize non-payment clients. Apart from the danger of advertising the security within a small number of days, they can slash off borrowers commencing extra way in to loans. The response of investment expenses changes with interest rates of having a loan from banks. The main objective of the study was to investigate the effect of interest rates on business investment performance. The specific objectives of the study was to find out the effects of cash lending on business investment, to evaluate the effects of loan repayment of on business investment performance and to examine the outcome of domestic savings on business investment performance. The literature review was viewed from other related studies. The conceptual framework had two variables according to the topic under study. The independent variable was interest rate and dependent variables were business investment. The study area was in Kisii town. The target population was all employees of 18 commercial banks more so branch managers, head of units and credit managers. The researcher was select 6 commercial banks to represent 30% of the target population 18 commercial banks. The systematic stratified sampling was used to get the sample size which was arrived at through census and it comprised of 482 respondents of commercial banks. The data were collected by questionnaires as the research instruments. Data were analyzed by the use of descriptive statistics and it was presented the analyzed in figures and frequency tables. The study wanted to investigate whether loan repayment affect investment performance the determinant of credit analysis used before granting cash services to the clients. The findings showed that there was influence of loan repayment on financial performance in banks. The study wanted to indicate techniques of credit analysis used before granting credit services to the investment and found out that Firm undertakes legal action for clients who fails to repay with the least mean of the evaluation is done on credit worthiness of clients and determinants of loan repayment in microcredit are still debatable among different researchers that might be due to situational factors like country level factors, bank level factors and the condition of legal and regulatory framework of the country. Thus, these debates can only be resolved through quantitative analysis on the determinants of loan repayments. The study suggested for further studies.

**Keywords:** Cash lending influence; Loan repayments affect; Domestic savings; Business investment; Performance; Commercial banks

**Abbreviations:** ANOVA: Analysis of Variance; GNP: Gross Net Product; GDP: Gross Domestic Product; IR: Internal Rate; NPART: Non-performing Asset Recovery Trust; NPLs: Non-Performing Loans; IIA: Internal Institutes of Auditing; MPS: Market Price per Share; ROE: Return on Equity; MFIs: Micro Financial Institutions; CBK: Central Bank of Kenya; AR: Auto Regressive

### Chapter One

#### Introduction

**Introduction:** The chapter discusses the background of the study, statement of the problem, objective of the study and significance of the study.

**Background to the study:** Interest rate is the charge a borrower pays for the money lend to him for business or other transaction motives. Investors borrow money from banks and other financial institutions. The response of investment expenses changes keenly with interest rate which is at the mind of money-making analysis. Interest rates is the other strong factors that affect financial policies as well as

weaker financial payments in guiding principles of investors, it facilitate investment if the high interest rate is applicable on savings. Interest rate influences savings practically all commercial banks commencing macroeconomic theories. The negative influence of higher investment rate inhibits the macroeconomic effect of interest rate policy. In New York, borrow and cash offers money as a guarantee to the lender of collateral. This is the most common form reinvestment in business performance. This program takes the type of customized term loan of a portfolio of securities. Because the transaction is customized, it

\*Corresponding author: Emmanuel Nyambane Nyakundi, Mount Kenya University School of Business and Public Management, KISII, Kenya, Tel: 0724671745; E-mail: [emmanyaku@yahoo.com](mailto:emmanyaku@yahoo.com)

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is difficult to make general statement regarding its use. That said borrowers may negotiate an annual fee for rights to borrow securities from beneficial owners entire portfolio [1].

The net result is a government spending on GNP which has been the remains to single significant source of difference in excess of stabilization interest rate policy. The purpose of interest rate is in response to money investment to look forward in narrowing the divergence concerning the effects of cost and interest rates in the commercial banks. The reactions of interest rates depend on the fundamental substitutability of capital for other factors in investment to take place. Stabilization policies involve both long-term and short-term rates other than investment act in response to long term rate. Investment progression is extended in sufficient to maximum value to the instant outcome of changes in the price of capital invested. The investment rate take place in a given year and only is large in consequences of irreversible decisions made in an untimely years, and small fraction can be influenced by alteration in that year within the financial investment. The annual fee may represent a good bargain for the lender or borrow for the securities held in that portfolio [2].

More than the years, there are better come to be momentous in interest rate problems in both, developed as fine as rising financial system [3]. Bank interest rates, regularly are in dissatisfaction with financial distress have cause problems numerous banks on investment, several of which have been congested downward through authoritarian concern. This in revolve led to reduction of interest rate on the investment activities, production, plus imposition of considerable costs on the cost-cutting measure [3]. The rate of banking crises in conditions of production loss which has been high; characteristically twice the number fraction of GDP [4]. It is clear that lots of credit system have continued serious on losses because of regrettable interest rate on loan collection. IR should somewhat depend on loan recuperation to have a continued investment positioning with this regard so that they can get together their purpose of improve investment [5].

For Global study let an important person to differentiate that loan payment is difficult, because of an unresolved IR subject which is an appearance of the majority of financial investment as well as bank loans. In Malaysia, interest rates comes to be one of obstacle to the growth of commercial institutions so as to suggest any credit given to micro business as well as SMEs which were to take interested in receivables due to interest rate in repayment determinants of repayment in microcredit business [6]. It is evidenced from determinant of repayment in the United States entrepreneurs. Thus, show the way of underestimating financial risks deal with most Chinese financial organization [7].

In China, banks look to put emphasis on deposits than the borrower's capability to settle up the loans in terms of interest rates. In 2006, the Indian governments splintered down on two large micro financial institutions subsequently to suicide of slightest sixty of their consumers who were in stress to repay loans on high interest rates. This rise in deceptive movement, ensuing in some cases to company failure with disastrous effects for shareholders, employees and other stakeholders has brought into sharp focus on the importance of interest rates [8]. Such IR will not only reduce the frequency of loans borrowed within companies, but also facilitate bank management to deal with quickly changing economic investment, shifting customer demands and priorities, and restructuring for future growth. In effect, interest rates are utilized to maintain the company on the course of profitability goals, achievement of its surprises along the way [9].

Within Greece commercial banks, non-repayment subject has

been very famous which has been seen very severe growth in non-performing loans due to interest rate ratio. The IR tendency has been increasing since 2003 to 17.2 million in 2012 [10]. In the region of Bangladesh Banking Sector was considered by low profitability due to inadequate in capital base. The bottom of the interest rate problem lies in the accumulation of high profit of nonperforming loans above extensive rates. The concept of interest rate is as in material form in IIA with other bank account through specialized accounting organization, which has assorted over time with geographically. There are, however, a number of similarities in the events that shaped professional statements concerned with interest rates in the United States which are in the aspects of money control in circulation that go beyond simple checking loans procedures. Interest rate regulatory control system" means all the policies and procedures adopted by the management of an entity to assist in achieving practicable rates, including adherence to management policies and the safeguarding of investments and preparation of reliable financial information [11].

In Africa, most small businesses fail to pay their credit they borrow from banks in the first year due high interest rate of support from bank regulatory authorities. In Zimbabwe, most banks have been liquidated in the year 2004 and 2005 [12]. Commercial banks that were closed during this period include the Barbican Bank, the Royal Bank, and Trust Bank. The MPS point out that the termination of this organization was considerably credited to due to interest rate payment in loans. In January 2012, the director of the Reserve Bank limited in Zimbabwe, Dr Gideon Gono distinguished by means of gradual worsening in investment value as reflected by the intensity of interest on loans to investing on business activities [12].

In Ethiopia, banks and MFIs have been persisted to look on average between 20% and 40% bad debts written off yearly. Non-performing Asset Recovery Trust (NPART) report 2006 revealed that 84 billion shillings were still held in their books as unrecovered debt with 31 billion shillings individual commercial banks collection [13].

In Tanzania, interest rate was free in 2010 as well as in the company of price water house coopers which stuck between 2007 on the way to 2009 the entirety in profits of the banking commerce is more than twice as 793 million during 2007 on the way to 1.5 billion within 2009. On matching interest rate becomes quick declining of the business which is negatively affected by interest rate margins [3]. Loan impairment charges for non-interest rate on loans in excess of three year period greater than 60. The central bank of Ghana was shown by loan ratio measures the ratio of loan losses to total loan advances, increased as of 16.2% during December 2009 on the way to 17.6% since December 2010 [14].

**Interest rate in Kenya:** Interest rates are important sources of revenue to commercial banks but affect owners investment decisions. Interest rates going on in lending uncertain in the business enterprise for the reason that repayment of loans can rarely be fully assured. The potential of loan borrowers on the way to reimburse their loans is significant and difficulty in consideration. Borrowers can reimburse their loan or otherwise make a decision in the direction of defaulting. Borrower defaults may possibly be unpaid or unintentional [15]. In Kenya bank loans amounting to ksh80.6 billion had gone for more than three months without being serviced as at December 2013, which was an increase from 61.6 billion the previous year [16].

The gross non-performing loans (NPLs) increased by interest rate at 31.6% from ksh77.3 billion in June 2013 to ksh101.7 billion in June 2014. Similarly, the ratio of gross NPLs to gross loans increased

from 5.3% in June 2013 to 5.7% in June 2014. The spill-over effects of high lending interest rates in 2012 and challenges in the business environment contributed to the increase in NPLs [16].

**Investment performance:** Investment performance is an indicator of how profitable a company in relations to its total assets and cash inflows. It is measured by means of asset returns. In general investment performance in the last two years has been recovering through interest rate. Nevertheless, this does not denote that all investors in the commercial industry are profitable since there are those that are pronounced in losses. This does not leave out interest rate on other Microfinance organizations [17].

To measure the profitability of investment is simply taking variety of ratios used of which Return on Asset, Return on Equity as well as Net savings. Investment measures are articulated in terms of monetary units. The method is extensively used for investment investigative purposes include; ratio analysis. Ratio analysis gives a purpose of depiction of a company's investment performance because ratios do away with the dimension of outcome [14].

### Statement of the problem

Interest rate is important in investments but it is discouraging because our banks are charging high interest rates than it is required for borrowers who invest [18]. There are serious problems in which Central Bank of Kenya is trying to put control measures to reduce interest rates on borrowers of commercial banks due to market unpredictability. Interest rates in Kenya should be restricted, because of market dynamics which make banks to charge as much up to 26%, hence the problem of accessing investment is not well priced. Central bank is expected to negotiate further about value of currency Kenya Shilling against Dollars rates to the bank borrowers without affecting normal investors. Though they are easy and simple to compute, investors do not get it as an economical source to their investment in relation to how much money to be charged on their existing capital equipment on their investment decision. There is a serious problem which attempt to measure reverse of interest rates among banks in Kenya. Bhatt and Tang [19] studied the effects of determinants of loan repayment in microcredit in the United States. The study found out that repayments of loans are affected by low income.

Aboagye [13] did a study on the effects of banking rates on deposits and withdrawal in Ghana. The study found out that the effects of banking rate increase market dynamics. Kinyanjui [20] studied the effects of loan repayment on borrowing behaviour between MFIs. The study found out that loan repayment rates discourage borrowing behaviours. Numerous repayments of loans by investors increase borrowing costs which lead to defaulting risk of larger loans since it reduces cash inflows. It is with this respect the researcher wanted to investigate the effects of interest rates on business investment performance in Kenya, case of selected commercial banks in Kisii town.

### Objectives of the study

The general objective of the study investigated the effects of interest rates on business investment performance in Kenya, case of commercial banks in kisii County. The specific objectives of the study were to:

- Investigate the effect of cash lending on business investment performance of commercial banks in Kisii town.
- Evaluate the effects of loan repayment on business investment performance of commercial banks in Kisii town

- Examine the outcome of domestic savings on business investment performance of commercial banks.

### Research questions

- How do cash lending influence business investment performance of commercial banks?
- How do the loan repayments affect business investment performance of commercial banks in Kisii town?
- Does domestic saving affect domestic savings on business investment performance of commercial banks in Kisii town?

### Scope and justification of the study

The research focused on the effects of the interest rate on investment using case of commercial banks in Kisii County because there are numbers of banks in the area the researcher to focus on. The study used questionnaire to collect data from the field for analysis purposes.

A lot of literature has to be reviewed on investment performance, and interest rate normally place a lot of emphasis on investment as measure to ensure sustainable and improved business performance, however, it was the perception of the researcher that there are still gaps in the research so far done.

This study therefore, established the effects of interest rate on investment performance as it measured by productivity and returns of equity. In view of the above, managers, directors and even chief executive officers should undertake thorough research on the same field to ensure that our economy continues to grow though maximization of wealth.

### Significance of the study

The researcher looked forward to its findings which were used in many ways:

To management of the banks and monetary policy makers of the government also found this study of value to them for it provided a formative evaluation of investment process. This study was significantly to the scholars might find this study useful since it provided up to literature. The other interested researcher used the findings of this study for further discussions with the customers in business research topics that found this study relevant.

To monetary policy makers of the government also find this study of value to them for it provided a formative evaluation of investment process while highlighting the possible areas that pose challenge to the success. To the investors it identified the challenges and signal early warning towards the implementation of interest rates. The literature used for scholars who would like to learn the issues related to investment estimation in Kenya.

### Limitations of the study

The study concentrated on the effect of interest rate on investment performance variables in Kisii County. The Limitations of the study occurred when the researcher maintained topic of the study and he could not study any area of other study other than investment.

The research was limited to the Kenya commercial banks within Kisii County as at the time of the study. The interfering of the investigator will react to the question as do the interest rate system really work as expected in banks.

The other limitation belief that the research might never be read,

thus people got the benefit to investment performance. The main limitation of study was of its inability to include banks but only commercial banks. The study would have covered more banks across all Kenya but is only to take the study in Kisii County. The researcher assured that the information used for academic purpose only.

### Assumptions of the study

The study assumed that the bank staffs were on working hours through the study time, the study carried out successfully, in addition to bank agreement measures accepted via management to the financial policies stay behind interest rate variation for the period of this research. It is what's more of the hypothesis of the investigator to know that every one of the respondents who interviewed and act in response confidently.

### Operational definition of terms

**Commercial bank:** This is a type of banking services which is provided.

#### Loan repayment

- Paying back the money borrowed from banks
- The act of reversing money previously borrowed from lender

**Lending rate:** The money charged on loan received in periodicals

#### Interest rates:

- This is a rate which is charged or paid for the use of money.
- It is often expressed as an annual percentage of the principal.

**Investment performance:** The sum of borrowed money upon which the debtor has made scheduled payments for business growth by cost of capital

**Domestic savings:** This is the monetary value of all deposit for personal use

**Cash lending:** This is giving out in money with security/give somebody loan of cash with guarantee control measure policy put in place to maintain value of currency rates of Dollars against Kenya shillings.

## Chapter Two

### Literature review

**The concept of interest rate:** Interest rate is the price charged for borrowed money. Shareholder has to get a loan of money from banks and other financial institutions which they pay back with a percentage. The response of savings changes effectively with interest rate which is at the mind of commercial bank analysis policy. The other big and strong investor is a financial stability as well as weaker fiscal payments guiding principles which are the stimulators of low interest rate on savings major channels of financial rates.

**Theoretical framework:** This chapter presented different theories which highly developed in relations to interest rate on investment.

**The liquidity preference theory:** The theory gives facts which are predictable in raising capital to promote investment through Keynes. The favorite decision is of those investors who have a preference for better liquidity payable together with interest intimidation as well as defaulting turn over to maturity rates. Owners of long-term liquidity set in the danger that interest rates will increase during the payment period

building their permanent rate in investments less priceless. Likewise adverse changes in the monetary conditions of the business are also a principle of time today certain than tomorrow, subsequently month is further convinced than subsequently as well as the opportunity of non-payment increases period. Investors are as a result to lowly rate only on the through expression as well as most liquid investments [21].

The theory of liquidity holds that long-term business securities should give higher returns than short term debt since investors are willing to give up a number of ways to spend in short loan obligations to keep away from the higher charge instability of extensive maturity rates [22]. An increased partiality for liquidity within the interest rate model is as good as demand for money which increases more customers who believe interest rates are predictable to increase profits than credible go down. The study seeks to make out the fundamental principle of the liquidity in partiality theory on the relationship between the money supply in the type of loans given by commercial banks in period of increasing borrowing rate as well as or declining lending rate of the lender. On the further, banks give borrowers a chance in their way only to invest where returns are on their asset not to go beyond the borrowing rates [23].

**The agency theory:** The major function of this theory is to talk towards the fundamental business supposition that there is concerned between the risks tendency of money as well as their agents to focus on their events winning justifying their individual risk at the depletion of owners. The agency theory propose that business owners must take this concern and avoid agent doings correlated to ethical risk by watching managers as well as a rising mechanism that bring into procession interests of the agents through principals to prevent opportunistic proceedings by means of their agents. The unique theory of agreement between managers as well as agents runs reply to the supposition of the unusual, convenient, opportunists so as to managerial economists contain obtainable as the model of firm organization within a marketplace structure.

Current agency theorists encompass hopeful variety of control on marketplace for business control, the marketplace for managers have to explain organization [24]. Currently admired a push as well as scholarly to give collection of instance wherever bottom ahead of the organization direction not simply did not have the preferred consequence except increased good risk in the middle of their executives. The steward director believes ownership will justifiably share the outstanding assert from the business therefore maximization of wealth intended for the owner share of the park ranger boss. The agency theory indicates that there is no position among the interests of managers as well as owners since steward managers suppose the search of what is the most excellent for the business in what is the greatest for their component with themselves. Procedures that advantage the business and their owners are in use even if such procedures are not in the agent's instant self-centeredness [25].

Agency theory also argues that those can organize self-interest. In this case, the directors are not forced by individual or personality goals except to a certain extent by [26]. The theory holds that for an investor to continue to exist in investing activities must he/she take danger to what to invest in, thus interest rate come as a risk from loan offered. The supposition of hazards refers to the option of moral hazard of individual being less disturbed about unhelpful penalty of interest rate responsibility in a business risk as a product of having some type of indemnity. In Moral hazard theory hold that an investment is a risk taker in bank to let somebody borrow does not refer to situations where lenders cannot become aware of either to try from side to side nor do

something through the borrower interest rates, or the understanding of business enterprise profits. Some small investor are regarding borrower's action connecting the time of the mortgage which pay out as well as the borrower's business enterprise, the result has been appreciated is not to be disclosed as previous pot of moral hazard.

Aghionet [27] ex ante moral hazard relates to the thought that visible actions or labors are in use by borrowers following the loan which has been forfeited except earlier than undertaking profits are one basis of credit market deficiency is frequently referred to seeing that "ex situation moral hazard" otherwise the "enforcement complexity." The turn of phrase in ex state of affairs refers to difficulties that materialize after the credit is complete as well as the borrower to spend. Still if those steps take on strong, the borrower will create assessment to acquire the cash as well as run" on one occasion venture profits are recognized. This variety of business state arises whichever the lender does not completely watch the borrowers' proceeds (thus the borrower can incorrectly uphold a loss as well as non-payment), otherwise else, at what time having profits, the lender cannot put into effect refund through the borrower. Collections lending by means of monitoring can, though, persuade every set to bring rate to charge in ex situation to check the real profits consciousness of taking loans. The exploration of interest rate contracts to give you an idea about that the right of interest rate to use in highly business loans provides confidence in monitoring investment, among the borrowers while loan access is made in the relent repayment of all borrowers in the bank (The business loan individual threatened in prohibiting from further loans if more of its loan member is not capable to disburse back (stop investing dilemma or take it easy in the group with further expenditure), every person will check the new members so that investments are undertaken in a gainful way. Further, every person will hold up the group members to invest if they took reimbursement hazards if they are not liable for, and each borrower will be put under pressure if he misses his finance. At the same time as an interest rate result, the prospect of honest vulnerability is reduced since it initiate cooperative agreement as a substantial fraction of the investment risk is reassigned from the lender to the investing loan borrowers [28].

**Default theory:** This theory was proposed by Vigenina in 2004 to explain investors defaulting payment in terms of changes in interest rate of money given for investment. The density of non-payment arises when money borrowers are capable to pay but reluctant to convene their money obligations. With combined legal responsibility, if a borrower discards to reimburse his or her share of the loan credit, the entire rate in the group is taken carefully as being default behind subsequent loans. This encourages the grouping of interest rates in the banks whichever to pay back for offending associate or to make use of social demands on him. As a result of this encouragement, the bank lenders are competent to attain repayment of each and every loan by means of high prospect. As soon as it comes in the direction of mortgage contracts (if a borrower discards mortgage repayment), the loan official once more plays the central role by means of warning as well as if necessary authorize non-payment clients. Apart from the danger of advertising the security within a small number of days, they can slash off borrowers commencing extra way in to loans. The assets of non-payment fear are the main official of high interest rates within defaulting theory [29].

**The fiscal acceleration theory (financial support):** It is also refers to as financial acceleration theory in the financial concept on economic model. This theory tries to find details on how undersized financial shocks can be moderately large in the effects of lending as

well as borrowing behavior in financial market. The premise relies on the interaction among monetary agents' netting business value as well as the external money premium that take place due to a symmetric in order between lenders along with borrowers. The financial accelerator product on domestic expenditure occurs since households, as well as firms, invest several of their expenditures by means of money borrowing. In particular, domestic deposit usually finances investments in somewhere to live as well as purchases of other long-lasting goods through raising funds within credit market. These money transactions are too characterized through asymmetric information evils flanked by the borrowers (home) along with the lenders (banks). Consequently, households' capacity with/or conditions beneath which they are able to get hold of funds, for this reason their expenditure, are also prejudiced via their net worth. Since pragmatic in a large amount of households' borrowings are protected by real estate investment, the prose has been listening carefully above all on the effect of rate changes in residence investing values [30].

Financial increase of rate on domestic costs as follows. An optimistic shock to financial activity causes an increase in house deposit charge, which shows the way to boost in homeowners' disposable merit. This reduce the outside finance rate, which leads to an increase in housing investments as well as spills over interested in use demand of expenses [31].

In the Short-run interest rate produce variation which has usually been measured as a product of a variety of financial shocks, which are conveying diverse transmission machinery. One of the ordinary ways of thoughts concerning the invention of amount produced schedule in excess of a short-run stage is an auto regressive (AR) development [32].

Financial acceleration results to materialize outstanding in the direction of a symmetric order of difficulty that restrain the capability of banks to get hold of funds from borrowers in trade as well as in comprehensive inter-bank monetary marketplace. In view of the fact that banks come in the deposit market as borrowers given they can go insolvent as well as investors, there is no motivation to take for fixed so as to banks' capability to accumulate funds on the interest rate expenses of the funds which will not be biased through their bank resources. To the amount so as the financial shocks have an effect on banks net value it strengthens the influence of banks ability to attract customers for loans of investing finance [33].

This theory gives an option on how commercial banks deal with calculation of interest rate on loan borrowers. The cash rationing hypothesis advice that lenders has to control the amount of credit they offer away to their borrowers depending on the existing interest rates in addition to available security or reserve of collaterals. Commercial as one of the lenders will be in determination to make conclusion to let somebody borrow or not on the way to lend depending of collateral that has been existing to them as a result of a borrower. If the lenders pay out loans at far above the ground of interest rates, they pull towards riskier investments along with chances of borrowers keeping away from them to convene their reimbursement supplies. The condition of money base on other bank option to security will give borrowers opportunity of non-payment on their loans because their association with the lender is not as physically powerful when guarantee is concerned. The financial credit distribution hypothesis suggests that the benefit that interest rate is extremely momentous in the influential of the interest rate on the amount of financial investors which will be keen to lend money to determine the ability of the borrower to pay back on the investment loan [34]. It deals with the emotional reaction people experience after realizing they have made an error in judgment. Interest rates is a selling stock, investors become affected by the price at

which they purchased stock. So they avoid selling it as way to avoid the regret of having made a bad investment, as well as the embarrassment of reporting a loss. Regret theory can also hold true for the investors who find a stock they had considered buying but did not went up in value. Some investors avoid the possibility of feeling this regret by following the conventional wisdom and buying only stock that everyone else is buying, rationalizing their decision with everyone else is doing it [35].

### Empirical literature

**Cash lending on investments:** Cash lending refers to the process of making decisions concerning lending in securities on reinvestment. Frank Keane [36] studied the effects of securities loans collateralized by cash in reinvestment risk. He found out that securities loan collateralized by cash are by far the most popular form of securities lending transaction. The study tried to argue that the standard compensation scheme for securities lending agents which typically provides for agents to share in gains but not losses, creates incentives for them to take excessive risk. It also highlights the need for greater scrutiny and understanding of cash reinvestment by practices especially in the light of investor's experience. He did not conclude any information about interest rate of investment in his study.

Borrow and cash offers money as a guarantee to the lender. This is the most common form reinvestment in business performance. This program takes the type of customized term loan of a portfolio of securities. Because the transaction is customized, it is difficult to make general statement regarding its use. That said borrowers may negotiate an annual fee for rights to borrow securities from beneficial owners entire portfolio. The annual fee may represent a good bargain for the lender or borrow for the securities held in that portfolio [1].

In his conclusion, argues that risk seeking incentives in agent compensation arrangements are the of cash market reinvestment activities are an uneasy combination that did contribute to transactions in sourcing specific securities for guaranteed market transactions. While it might tempting to suggest eliminating lending of securities against cash collateral such a policy response may be too extreme.

An increase in data transparency in particular around cash reinvestment choices seems likely to lower the possibility of reasonable cost to bear if it mitigates financial systemic disruption. Andrian [37] studied the effects of Securities and Repo Lending in federal bank of New York. He used the descriptive analyzed and concluded that market participants should consider both the social benefit of increased transparency and the need to refine standard agent compensation arrangements to limit the risk seeking incentives of agent in the securities for cash, the industry carefully tracks investment income as a performance metric suggest that is not typical form of securities loan transactions. He found out that cash providers should carefully monitor the lending transaction as a credit extension when the intrinsic value of the collateral is not driving the transaction. A counterparty that extends large amount of cash will want a good understanding of reinvestment activity it supports. Admittedly such diligence might prove difficult or impossible in practice as cash is fungible and cash borrowers or security lenders may have incentives to disclose credible but inaccurate description of asset to invest.

Vermeulen [38] studied the response of firm's investments and financing to adverse cash shocks. The objective of the study was the role of bank relationships in the European Central bank. His main purpose was to find out the effects of financial constraints, lending relationship, firm investment and firm financing. He found that in his economic

theory suggested that lending relationships are useful in overcoming asymmetric information problems between creditors and their clients. Consequently, firms with deep lending relationships benefit from better credit conditions. He argue that it is especially in terms of adverse cash flow that financial constraints are more likely to be binding and that firms more strongly need external finance, they have to reduce spending, including investment spending. Single and multiple bank relationship firms show that the same investment reaction to cash flow in periods of adverse cash flow shocks. Single bank relationship is not especially helpful in alleviating financial constraints problems during bad times. Finally he investigated the determinants of the probability of obtaining extra bank debt. It found that a single bank have a lower probability of obtaining bank credit in adverse cash flow shock periods is higher the larger the firm and the lower initial leverages. From the findings it was concluded that really impedes investment in adverse cash flow periods is when firms cumulate a drop in cash flow and a contraction of external bank credit. It depends more on the size and the initial leverage of the firm than on the number of bank relationships.

**Loan repayment period:** Loan is paid within periods which are as short term or long term. Godquin [39], did a study on loan reimbursement performance of MFI borrowers within Bangladesh banks. Then his findings from the study disclose that mortgage with refinement periods which have considerably lower rate on loan criminal behavior than usual loans. His conclusion also hold up the argument that declining in the number of loan repayment customers stand to the possible to raise the competence in MFIs, as agreement loans are not related with high lend defaults. Santiago and Francisco [40], studied the effects of bank lending and financing constraints in SME Investment in the Federal Reserve Bank of Chicago. The study shows that investment is sensitive to bank loans for unconstrained firms but not for constrained firms. He also found out that unconstrained firms use bank loans to finance trade credit provided to other firms and predicts investment.

Tomaki [41] conducted a study on the determinants of bank interest rate on borrowing behavior of commercial banks in Turkish for a sample of eighteen from 25 banks. The main objective of the study was to identify the determinants of bank interest rate behavior. The data was enclosed 2003 to 2012 periods. The variables used were size, access to long term funds, interest rates, GDP growth rate and inflation rate. The finding reveals that bank size, access to long term loan and inflation rate have significant positive impact on the bank's lending behavior but, interest rates is of no consequence. Fishman and Love [42] studied the effects of banks loan on investment assessment. The study used a new method to evaluate the investment in terms of loan given. It shows that it is easier to lend to encourage more business to borrow and repay the amount borrowed. Whether these firms can link their investment to either bank loans or trade credit but they did not discuss the effects of interest rate on investment.

Wool Cock [43] in his study Micro enterprises and social capital the study observed that if the loan term is too short, the borrower fails to generate revenue to enable him/her make repayments while a longer loan term may make the client extravagant and the client may in the end fail to pay back. Hopenhayn [44] examined the bank loans and investment variables. The study was interesting determinant of loans for financing their customers. The findings from the study show that desired amount of loans exceeds the supplied amount of loans at constrained firms, loans will predict the level of investment at constrained firms but he did not address interest rates on investment.

**Domestic Savings on Business Investment:** Domestic savings are

based on the personal money in the bank. With high interest rates, investors will save more money to earn and vice versa. ZAMTIE [45] studied the effects of interest levels in relation to factors affecting investments. Consistently high margins demanded by Commercial banks between their based rates and the actual cost of servicing bank loan and overdrafts. The study found out that current regimes of interest rates prevailing Kenya economy have been heavily induced by high government borrowing on domestic debt. Due to high government borrowing, commercial holdings in bonds which have been increasing steadily while the level of lending to private sector has been declining. He argue that the main part of concern is where the government is in use of borrowed funds which are intended to the financing of consumptive expenditure and maintenance of large organization.

Bhattacharya [46] studied the influence of interest cycles on domestic rates. The study objective was to integrate domestic financial sector with external sector. He established that there is slacking of restrictions in the cross movement of capital across business entrepreneurs. The economy would affect domestic financial market with a significant lag. According to market conditions of demand and supply of credit thereby enabling the economy to withstand and control the inflexible interest rate policy is prone to macroeconomic instability. Senhadji [47] also examined the relationship between loan booms and asset price cycles, on financial crises across the East Asian countries. The study regressed tax rates lending booms against asset prices and financial savings. The study found a physically powerful relationship between bank lending and asset price to save. They established that the optimistic growth expectations, heavy capital inflows, inadequate corporate governance, and dependence on intermediation by under-regulated banks all led to rapid credit growth, especially in the real estate market. They state that the real estate market is particularly vulnerable to the formation of price bubbles because information asymmetries are larger, the supply is more rigid, and the market is therefore more imperfect. Through a VAR analysis, they conclude that property prices are strongly procyclical and that the bank lending has contributed to the inflation of property prices prior to crisis period. They also find that the response of property prices to credit is stronger during times of rising prices than the response during times of falling prices. The main policy implications of the paper are to strengthen credit assessment while reducing reliance on collateral and to reduce the moral hazard in the banking system

Boyde [48] studied on the impact of inflation on consumption, savings and investment. They concluded that higher inflation rate is related with higher consumption variation in interest margin and stock return and also inflation surpasses to investment critical level, then incremental increase in the long run rate of inflation has less impact on banking sector activity. Higher expected future incomes raises current consumption even at the same current income level so saving declines. Al-Timmi [49] in their study of the consequences of increasing prices and interest amount of loan exposed that the macro-economic factors have a damaging and significant impact on economical industry. He argued that higher real interest rate has effects on the substitution effect on savings which is positive because a higher rate of return is a greater reward for saving and income effect on saving is mixed and it is negative for a net because it takes less saving to achieve a given amount in the future target saving while it positive for a net borrower because a higher real interest rate represents a loss of wealth.

Catherine and Vermeulen [38] evaluated the response of firm's investment and financing. The objective of the study was to analyze the determinants of national saving which are desired on domestic

saving increase with a rise in current income because part of the extra income is saved. He argued that decrease with an increase in expected finance because a higher expected future income raises current desired consumption and reduces current desired saving. He added that decrease in an increase in wealth because some of the extra wealth is consumed, which reduces savings for a given current income. Probably increase with an increase in expected after tax real interest because the return to savings probably outweighs that less must be saved to reach a savings target.

### Interest rate

Interest rate is the money charged on loans. Ngetich and Wanjuo [50] conducted a study on the effects of interest rate spread on the level of non-performing assets. The study focused on commercial banks in Kenya. This was a case study with an aim of establishing how interest rates affect non-performing loans in commercial banks operating within East Africa. Both quantitative and qualitative data were used in the study. The findings from the study revealed that the spread of interest rates affects the non-performing assets in commercial banks by increasing the cost of loans charged on the borrowers. When the cost of loans is high, there are high chances of loan default and likelihood of having a huge non-performing loan portfolio. But they did not address the impact of interest rates on business investment performance. Therefore, there is a gap to be filled by the study.

Kipngetich [51] used regression model to investigate the relationship between interest rates and financial performance as the independent variable and interest rate as the dependent variable established that there is a positive relationship between the two variables though the effect of interest rates on profitability is not significant in the all the financial institutions. In his view all the other factors which influence profitability needs to be enhanced to in order to improve the financial performance of financial institutions in Kenya. Onyekachi and Okoye [52] examined the impact of bank lending rate on performance of Nigerian Deposit Money Banks between 2000 and 2010. It specifically determined the effects of lending rate and monetary policy rate on performance of Nigerian Deposit Money Banks and analyzed how bank lending rate policy affects performance of Nigerian deposit money banks. The study utilized secondary data econometrics in a regression, where time-series and quantitative design were combined and estimated. The result confirmed that the lending rate and monetary policy rate has significant impact and positive effects on performance of Nigerian deposit money banks.

### Investment performance

Investment fluctuates sharply over the business cycle. Investment plays a crucial in long term growth. Investment is determined by return on investments; changes in the desired capital stock. Desired Capital stock is the amount of capital that allows firms to earn the largest expected profit which depends on benefits and cost of additional capital. The associate capital is real cost of using a unit of capital per year. This is called the user cost of capital (uc), which equals the sum of the real interest cost (r) and depreciation (d) and price of capital (p). Mwangi [53] carried out a study on the effect of non-performing loans on the investment financial performance of commercial banks in Kenya. The study found how the effects of non-performing loan portfolio distress the success of commercial banks within Kenya. Secondary data were obtained from the banks relating to two variables: Return on Assets which was the dependent variable and non-performing loans which was the independent variable. The study adopted simple linear regression model of the form  $Y=a+bx$  to establish the effect of non-

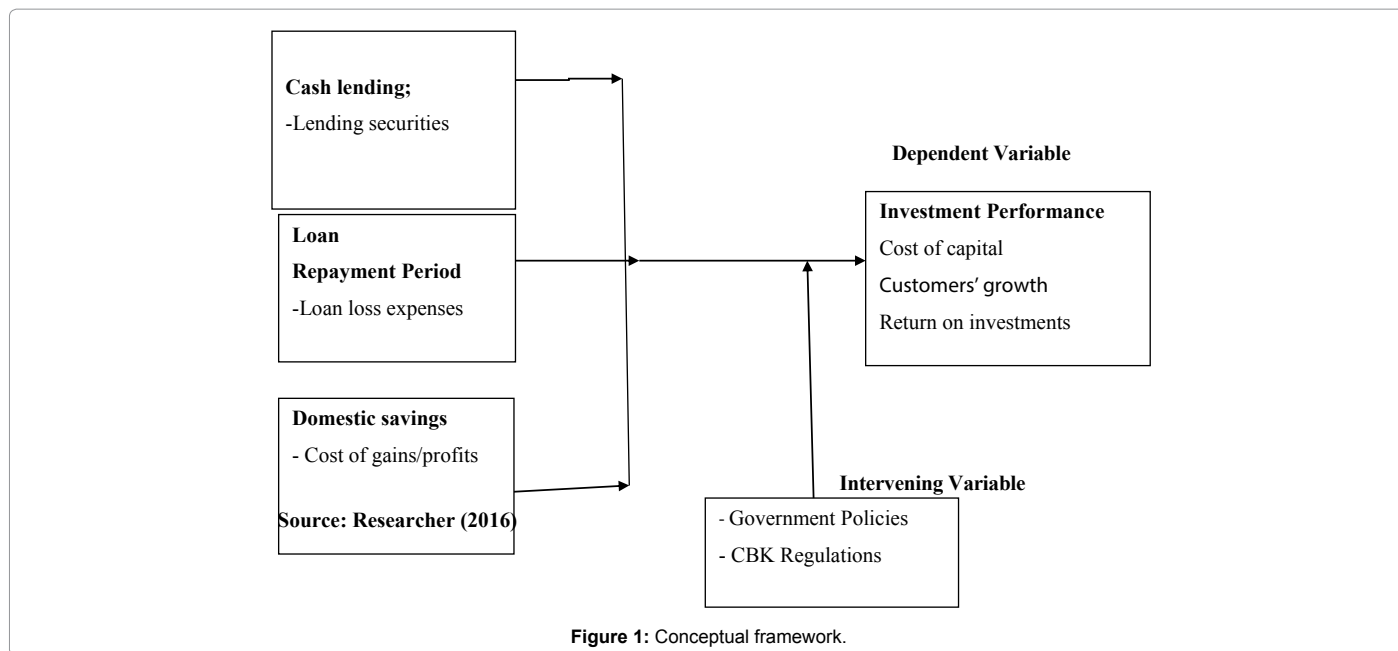


Figure 1: Conceptual framework.

performing loans on the commercial banks. The found out that there are high amount of non-performing loans in low ROA. However, later years showed a different trend in cost of capital to invest was higher in the non-performing loans which are slow.

Jagongo et al. [54] did a survey of the factors influencing investment decisions. An individual investment is concerned with choices about purchases of small amounts securities for her own account. The objective of the study was to find factors affecting investment decisions; dividend growth and profit savings. Firm's positions and performance and economic conditions are based on profits. He established those investors are already holding stock in ways on sell and purchase of houses and individual stock brokers. They found that large investors generate abnormal volumes for buyer initiated trades after a positive recommendation only if the investor is unaffiliated. The same study is also shown from Nwangbo and Onkonkwo [35] in Nigeria who asserted that high interest rate and requirement for collateral demanded by banks as a source of capital for investment in market gardening in the state.

Wanjira [55] conducted a study the relationship between management practices and financial performance in Kenya. The main focus of this study was to establish how financial performance of investors is affected by the type of investment management practices. The study used primary and secondary data. The secondary data were obtained from the audited financial statements of the 46 commercial banks of Kenya. No sampling was done since a census was possible due to the small number of commercial banks in Kenya. The study revealed that the type of investment management practices determine their investment performance.

### Conceptual framework

The diagrammatic representation of conceptual framework shows how the variables are related. Cash lending, Loan repayment period, and domestic savings are independent variables but investment performance is a dependent variable, which measures by cost of capital on the occurrences of the said independent variables (Figure 1).

### Knowledge gap

From the literature that has been reviewed, it is evident that repayment of credit affects a number of institutions. Tomaki [41] conducted study on the determinants of bank's lending behavior of commercial banks in Turkish. The study focused on commercial banking institutions and leaving out the determinants of lending behavior of micro-finance institutions.

Kinyanjui [20], studied to establish whether gender influences on the loan repayment behavior among the MFIs in Kirinyaga District. The study ought to have looked at the topic in a wider perspective in order to cover other variables borrower's characteristics which include both the age and gender and their influence on loan repayment behavior.

Bhatt and Tang [19] studied the determinants of loan repayment in microcredit evidence from programs in the United States. These determinants of loan repayment in microcredit are still debatable among different researchers that might be due to situational factors like country level factors, bank level factors and the condition of legal and regulatory framework of the country. Thus, these debates can only be resolved through quantitative analysis on the determinants of loan repayments. Mwangi [53] carried out a study on the effect of non-performing loans on the financial performance of commercial banks in Kenya. Wanjira [55] studied the relationship between non-performing loans management practices and financial performance of commercial banks in Kenya. All these two studies only concentrated on the commercial banks leaving micro-finance institutions. From the above related studies that have been reviewed it is evident that none of the studies have focused on the effects of loan repayment on financial performance of micro-finance institutions. This leaves a gap that needs to be filled. This study will therefore focus on this gap.

## Chapter Three

### Research methodology

**Introduction:** The study discusses research design, study area, target population, sample size and sampling procedures, validity and reliability of research instruments and data collection instruments and procedures, data analysis and presentation.



**Research design:** The research adopted a descriptive research design. According to Mugenda and Mugenda [56], descriptive design is a process of describing the situation the way it was with the aim of collecting data in order to test hypotheses or to answer questions concerning the current status of the subjects in the study. A descriptive study determines and reports the way things are. Descriptive survey design was appropriate for exploring the effects of interest rate on investment performance. It involves asking the respondents questions on how they experience from their views about phenomena which they observed directly.

It was advantageous in that it allowed the collection of large sum of data from the standard population in highly effective in using questionnaires [57].

**Study area:** The proposed study was conducted in Kisii town. There has been a tremendous growth in number of 18 commercial banks currently operating in the area and the issues of interest rate keep on increasing. The grouping of the above banks makes Kisii town to be appropriate choice for the study.

- **Target Population:** The study targeted all 18 commercial banks in Kisii town. The target population of the study was be 482 employees from the selected commercial banks in Kisii town which comprised of managers, head units, credit managers. The commercial banks employees in kisii town include the following; Family Bank 18, Kenya Commercial Bank 52, Cooperative 46, Equity 33, Barclays 32, standard chartered 24, Chase bank 28, K.rep 26, Credit 18, Jamii Bora 12, Housing Finance Corporations 19, Ecobank 17, Diamond Trust Bank 22, Chartered Finance Corporation 26, Bank of Africa 33, National 41 I\$M Bank 23 and NiC banks 12 these are from staff records from each bank.

**Sample size and sampling procedures:** Stratified sampling technique adopted and these gave every member of the population an opportunity of being included in the final sample. The sample size obtained using the coefficient of variation [58]. This was because most surveys from testing make use of coefficient variation of at most 30% is usually acceptable. Study took a coefficient variation of 30% and a standard error of 0.04. The sample size was determined by the following formula by Nassiuma and Dankit [58].

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

$$n = \frac{482(30\%)^2}{(30\%)^2 + (482-1)(0.04)^2} = 50.465 \rightarrow 50 \text{ Employees}$$

Where 'n' was the required sample, 'C'-coefficient of variation and 'e' standard error.

According to Nassiuma and Dankit [58] a sample of 50 respondents

S. No	Name of CBs	Branch Managers		Account Clerks	Credit managers
1	KCB bank	1	9	1	11
2	Credit Kenya	1	4	1	6
3	National banks	1	7	1	9
4	Equity Bank	1	7	1	9
5	Chase bank	1	6	1	8
6	Cooperative bank	1	5	1	7
	Total	6	38	6	50

Source (Bank Staff Records 2016).

**Table 1:** Sample Size of the respondents.

which was selected for the study and will comprise from six commercial banks employees as shown in the stratified sample frame below. It was also ensure that only people with applicable information was sampled from each stratum.

Then, the study used all 50 employees from the selected commercial banks for the study who are managers, accounts clerks and credit managers because they provided the required information. A simple random stratified sampling frame was shown below (Table 1).

**Validity and reliability of research instruments:** Reliability according to Mugenda and Mugenda [59] refers to the consistency of a measure. The study was collected through questionnaires. Piloting was carried out to test the reliability and validity of the instruments. According to Saunders [60] the use of the pilot test is to improve the instruments so that the respondents was not have a difficulty in answering the questions as well as make available for easy recording and analysis of data. A pilot study was conducted by the researcher taking the questionnaire to the executives from commercial banks not included in this study.

According to Mugenda and Mugenda [59], validity gets concerned with whether the instrument measures what it is supposed to measure. To ascertain the validity of the questionnaire, the researcher consulted widely. A final questionnaire was then printed and used to collect data to be used for analysis. This helped to assess the validity of the instruments and likely reliability of data was collected. Repeatability, or stability-over-time reliability, was measured with the test-retest method, whereby the same measure is direct to the equivalent respondents within the moment in time. Cronbach's coefficient alpha technique was also used to measure data reliability. It normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1.0 the greater the reliability of the items in the level.

**Data collection instruments and procedures:** Data were collected from both primary and secondary sources. The main primary source was questionnaire which was administered to the respondents. Semi-structured questionnaires used to gather data from managers, credit officers and head section employees who are involved in lending loans at the commercial banks. The questionnaire in the study was designed to include both structured and unstructured questions. This was to ease analysis of data collected as well as permitting a greater depth of response [61]. Secondary sources on the other hand include information and data from the published financial statements for the commercial bank.

**Data analysis and presentation:** Data for this study was analyzed using descriptive statistics such as, percentage, mean, average weighted mean and standard deviation. Regression and Correlation was used to give relationship between interest rates and investment performance by linear regression model. Qualitative data sample test was analyzed by judgmental means. Statistical Package for the Social Sciences was also be used to analyze data. The data was presented in tables and figures [62-74].

The t-test was used with ANOVA to test statistical significance of the independent variables while ANOVA F statistic was used to verify the level of significance by regression models. Multi variants analysis was used to come up with the following model:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e$$

Where

Y=Investment performance

Aspect	Frequency	Percent
Response rate	36	72
Non response rate	14	28

Field Data (2016)

Table 2: Response rate.

	Frequency	Percent
Certificate	2	5.6
Diploma	5	13.9
Degree	9	25.0
Masters	13	36.1
PhD	7	19.4
Total	36	100.0

Table 3: The discipline specialized.

	Frequency	Percent
Law	1	2.8
Education	1	2.8
Engineering	8	22.2
Commerce	19	52.8
Agriculture	6	16.7
Total	35	97.2
System	1	2.8
Total	36	100.0

Table 4: Field Data (2016).

	Frequency	Percent
Manager	2	5.6
Creditor	5	13.9
Head unit	10	27.8
Marketer	13	36.1
5	6	16.7
Total	36	100.0

Table 5: Cash Lending on Business Investment Performance.

	Frequency	Percent
One month	1	2.8
Two months	2	5.6
Three months	7	19.4
Above three months	20	55.6
Not at all	6	16.7
Total	36	100.0

Table 6: Field Data (2016).

$X_1$ =Cash lending

$X_2$ =Loan repayment

$X_3$ =Domestic savings

e=Error term

$\beta_0, \beta_1, \beta_2$  and  $\beta_3$ =Regression coefficients.

Investment performance as measured by Return on Equity which was dependent variable. Whereas cash lending, loan repayment and domestic savings are interest rates was the independent variables.

**Ethical consideration:** Moral considerations took in the banks. Questionnaires were prepared in such a way that there was no space of the naming. A statement as to the severe confidentiality with which data held specifically stated in the questionnaire. Further, act in response was optional, basically in explaining the reason for replacing respondents who do not wish to respond as mentioned in the sample

size and sample selection methods above. A moral consideration was also taken care of by the researcher meeting the respondents as to the purpose of their search, their significance in the research process, and prospect from them.

## Chapter Four

### Data analysis and presentation

**Response rate:** The study wanted to establish the level of response rate by number of questionnaire filled and returned. The number of questionnaires issued was 50 and only 36 questionnaires was returned and filled which represents 72% of the response rate and 14 (28%) questionnaires was not returned. The number of questionnaires returned indicated that the majority of the respondents had accepted the study (Table 2).

#### Background analysis

**Level of education:** The study sought to establish the level of respondents by education qualification and found out that Certificate diploma, Degree, Master, and PhD this indicated that 44% 5.6 % of the respondents had the lowest level of education with the majority qualified in the bank as shown in Table 3.

The study wanted to investigate the specialized course for someone to work in the bank and obtained the results shown in Table 4 which indicated that the majority of the respondents were specialized in commerce at 82.9% in the bank while the rest 17.1 are distributed from other field Table 4.

**The Title in the organization:** The study to examine the title of the respondents in their responsibility in the banks and the results showed in shown in Table 5 which indicated that the majority of the respondents were marketers at 36.1% in the bank while the rest under study 63.9% were randomly distributed in other titles as shown in Table 5.

The study had three objectives which were analyzed by their variables; this is the first objective among other objectives. The Period given as a grace for cash lending when lending is done was analyzed by number of months given and the results showed that the lender were given above three months which was highly indicated by 55.6% majority of the respondents while the rest of the respondents were still dispersed among other months representing 44.4% as shown in Table 6.

The study also wanted to establish as to whether any relevant information that relates to cash lending period was given in the bank and the results indicated that are there penalties for cash defaulters, CBs take legal actions when lend is not done time frame, in your own view do you accept that cash lending affects business performance and Always cash is lend within the stipulated time with 3.86, 3.80, 3.78 and 3.42, respectively in Table 7 summary.

The study wanted to examine as to whether important aspects of cash lending management is evaluated and come out the findings Firm undertakes legal action for clients who fails to lend, Evaluation is done on credit worthiness of would be investors, Time limit is given when clients are to lend, Investors are reminded to cash lend due with their of 3.92, 3.83, 3.78, and 3.58, respectively. The findings showed that every cash lend aspects there was relevant information given in Table 8.

The study wanted to investigate whether there is any techniques of credit analysis used before granting cash services to the clients and found out that cash is given by a techniques as shown by Table 9. The study concurred with Onkonkwo and Nwangbo [35] who found that

		Always cash is lend within the stipulated time	CBs take legal actions when lend is not done time frame	Follow up measures is taken when a cash lend out is overdue	Are there penalties for cash defaulters	In your own view do you accept that cash lending
N	Valid	36	35	36	36	36
	Missing	0	1	0	0	0
Mean		3.42	3.80	3.42	3.86	3.78
Std. Deviation		1.105	.868	1.079	.867	1.198
Sum		123	133	123	139	136

Field Data (2016)

**Table 7:** Relevance of lending cash.

		I regard to some important aspects of cash lending management	Evaluation is done on credit worthiness of would be investors	Investors are reminded to cash lend due.	Time limit is given when clients are to lend	Firm undertakes legal action for clients who fails to lend.
N	Valid	36	36	36	36	36
	Missing	0	0	0	0	0
Mean		3.64	3.83	3.58	3.78	3.92
Std. Deviation		1.018	.878	1.079	.898	1.228
Sum		131	138	129	136	141

Field Data (2016)

**Table 8:** Important aspects of cash lending management as evaluated in statistics.

		Techniques of credit analysis used before granting cash services to the clients	Character and willingness to lend	Capacity to lend and guarantee	Analysis of credit financial status
N	Valid	36	35	36	36
	Missing	0	1	0	0
Mean		3.44	3.77	3.53	3.81
Std. Deviation		1.107	.877	1.028	.920
Sum		124	132	127	137

Field Data (2016)

**Table 9:** Statistics of financial analysis.

	N	Minimum	Maximum	Mean	Std. Deviation
the time you give as grace time to your investors	36	1	5	3.83	1.231
Always loan is a pay back in the fixed time	36	1	5	3.50	1.134
CBs take lawful actions when credit is not repaid in time	35	1	5	3.86	.879
Follow up measures is taken when a loan is invested	36	1	5	3.53	1.108
Are there penalties for investors defaulters	36	1	5	3.72	.914
In your own opinion do you agree that loan repayment affects firm performance	36	1	5	3.83	1.231
Valid N (listwise)	35				

Field Data (2016)

**Table 10:** Analysis of loan repayment aspects.

	N	Minimum	Maximum	Mean	Std. Deviation
Evaluation is done on credit worthiness of clients	36	1	5	3.47	1.134
Clients are reminded to repay the amount invested due	36	1	5	3.81	.822
Time limit is given when clients are to pay	36	1	5	3.58	1.025
Firm undertakes legal action for clients who fails to repay.	36	2	5	3.92	.806
Indicate techniques of credit analysis used before granting credit services to the investment?	36	1	5	3.83	1.231
Nature and willingness to pay	36	1	5	3.58	1.339
Ability to pay and guarantee	36	2	5	4.00	.894
Valid N (listwise)	36				

Field Data (2016)

**Table 11:** Descriptive Statistics.

large investors generate credit volumes for buyer initiated trades after a positive recommendation only if the investor is unaffiliated. The same study is also shown from Table 9 indicated that analysis of credit of financial analysis was given by 3.81 followed by willingness and character to lend by 3.77 as shown above Table 9.

### Loan repayment on business investment performance

The study wanted to investigate whether there are any techniques of credit analysis used before granting cash services to the clients and found out that the loan is paid back by interest rates at 3.50. Are there penalties for investors defaulters 3.72 and central banks CBs take lawful

	Frequency	Percent	Valid Percent	Cumulat.Percent
Strongly disagree	1	2.8	2.8	2.8
Disagree	2	5.6	5.6	8.3
Not sure	7	19.4	19.4	27.8
Agree	20	55.6	55.6	83.3
Strongly agree-	6	16.7	16.7	100.0
Total	36	100.0	100.0	

Field Data (2016)

**Table 12:** Firm investment ever been affected by interest rates on savings.

	N	Minimum	Maximum	Mean	Std. Deviation
firm investment ever been affected by interest rates on savings	36	1	5	3.78	.898
Savings lowers amount allocated towards advancing interest rates	36	1	5	3.81	1.215
savings shy away clients from taking loans	36	1	5	3.58	1.339
Interest rate affects savings of invstement	36	2	5	4.00	.894
Savings affects investment performance	36	1	5	3.58	1.079
Valid N (listwise)	36				

Field Data (2016)

**Table 13:** The effect of domestic savings.

	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	1	2.8	2.8	2.8
Least often	2	5.6	5.6	8.3
Not sure	7	19.4	19.4	27.8
Fairly often	20	55.6	55.6	83.3
Most often	6	16.7	16.7	100.0
Total	36	100.0	100.0	

Field Data (2016)

**Table 14:** Interest rate change over time.

	Mean	Std. Deviation	N
Cash Lending On Business Investment Performance	3.70	.705	36
Loan Repayment On Business Investment Performance	3.70	.656	36
Effect Of Domestic Savings On Investment Performance	3.71	.633	36

Field Data (2016)

**Table 15:** Descriptive Statistics of correlation analysis.

actions when credit is not repaid in time indicated at the 3.86. The studies disagree with Frank Kean [36] who found Kean of securities loans collateralized by cash risk. The found out that securities loan collateralized by cash are by far the most popular form of securities lending transaction. The findings showed that there was influence of loan repayment on financial performance in banks in Tables 10 and 11.

The study sought to indicate techniques of credit analysis used before granting credit services to the investment and found out that Firm undertakes legal action for clients who fails to repay 3.92 with the least mean of the evaluation is done on credit worthiness of clients at 3.47.

### Domestic savings on investment performance

The study wanted to examine the effect of interest rates on investment performance and the results was indicated in Table 12 which indicated that level of agreement was accepted by the majority on the respondents that interest rates affect investment performance as shown set at 55.6% of the frequency analysis.

The study sought to determine the effect of domestic savings and found out that Interest rate affects savings of investment by 4.00 followed by Savings lowers amount allocated towards advancing interest rates at standard deviation of 0.894 as shown in Table 13

The study sought to investigate the effects of investment

performance over interest rate change and things were indicated that fairly investment performance is affected by change of interest rates by 83.3% cumulatively as shown Table 14.

### Correlation analysis

The study wanted to establish the correlation analysis of the study variables and found out that Cash Lending on Business Investment Performance, Loan Repayment on Business Investment and Effect of Domestic Savings on Investment Performance with 3.70, 3.70 and 3.71, respectively this indicated that individual variables are related and affect investment performance as in Table 15.

The study sought to establish the effect of cash lending, loan repayment and domestic savings. The correlation matrix of the variables is shown in the table below which indicated that Cash Lending On Business Investment Performance, Loan Repayment On Business Investment Performance and Effect Of Domestic Savings On Investment Performance with 1, ( 0.994", .000) and (0.988".000) respectively. In Table 16 the findings are shown that there all the variables were positively correlated to denote that that there is a strong positive relationship between variables. The study revealed that Cash Lending on Business Investment Performance, Loan Repayment on Business Investment Performance and Effect of Domestic Savings on Investment Performance had impact on investment performance.

		Cash Lending	Loan Repayment	Domestic Savings
Cash Lending On Business Investment Performance	Pearson Correlation	1	.994**	.988**
	Sig. (2-tailed)		.000	.000
	N	36	36	36
Loan Repayment On Business Investment Performance	Pearson Correlation	.994**	1	.998**
	Sig. (2-tailed)	.000		.000
	N	36	36	36
Effect Of Domestic Savings On Investment Performance	Pearson Correlation	.988**	.998**	1
	Sig. (2-tailed)	.000	.000	
	N	36	36	36

Field Data (2016)

Table 16: Matrix of Correlations.

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Chang	df1	df2	Sig. F Change	
1	.998 <sup>a</sup>	.996	.995	.042	.996	2568.406	3	32	.000	1.008

Field Data (2016)  
a. Predictors: (Constant), Effect Of Domestic Savings, Cash Lending On Business, Loan Repayment  
b. Dependent Variable: Investment Performance

Table 17: Regression Model.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.486	3	4.495	2568.406	.000 <sup>b</sup>
	Residual	.056	32	.002		
	Total	13.542	35			

Field Data (2016)

- a. Dependent Variable: ROE  
b. Predictors: (Constant), Effect Of Domestic Savings, Cash Lending , Loan Repayment

Table 18: ANOVA<sup>a</sup>.

Model		Unstandardized Coefficients		Standardize Coefficient	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.057	.049		1.158	.255	-.043	.157
	Cash Lending	-.065	.103	-.073	-.625	.537	-.275	.146
	Loan Repayment	.011	.247	.011	.043	.966	-.492	.513
	Effect Of Domestic Savings	1.041	.182	1.059	5.733	.000	.671	1.411

a. Dependent Variable: Return on Equity

Table 19: Coefficients of determination.

## Regression analysis

The study wanted to establish the effect of interest rate on investment performance(ROE) and found out that R<sup>2</sup> From Table 17 of coefficient of determination in the regression model R<sup>2</sup>=0.995 implying that 99.5% of change in investment performance model is due to the variables in the study. This also implies that 0.5% change in investment was caused by variables not under survey.

The study also used ANOVA analysis to test the findings from the study as shown in Table 18.

The F value in Table 18 indicated a substantially high figure of 2568.406 as compared to the study implying that the model is valid and can hold. The p-value of 0.002 less than 0.05 level of significance and therefore the model is a good model.

To determine the effect of interest rates on ROE, a simple regression model of the form which translates to  $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e$  was used while y represented ROE, was a constant of y intercept and b is the coefficient of interest rates. The results are as shown in Table 19.

The regression equation derived from the results was therefore  $Y = 0.057 - .065x_1 + 0.011x_2 + 1.04x_3$  where Y=Return on equity, X<sub>1</sub>=cash lending, X<sub>2</sub>=loan repayment, X<sub>3</sub>= domestic savings, e= error term.

$\beta_0, \beta_1, \beta_2$  and  $\beta_3$ =Regression coefficients, this means that increase in loan repayment by 1 unit increases return on equity by 1.041. The standardized beta value of -0.073 indicated that decrease in 1 shilling of cash lending causes an decrease in Return on equity by 7.3%, loan repayment increases by 1 shilling which causes an increase of Return on equity (measure of financial performance) by 1.1%.

## Sample test and principle component analysis

The study sought to determine the level of significance by one sample t test to test the findings of the study variables and found out that that the variable were less than nor equal to .000 indicated a strong impact on investment performance by the study variables under investigation as shown in Table 20.

The study also wanted to find the effect of interest rates by all components in the study by total variance explained and found out that 82.639% had impact on investment performance while 17.361% can be explained by other variable not in the study as shown in the table below (Table 21).

## Discussion

The study had three objectives; cash lending on investment performance which indicated that there is strong relationship with

	Test Value = 0			
	T	Df	Sig. (2-tailed)	Mean Difference
Cash Lending	31.436	35	.000	3.695
Loan Repayment	33.860	35	.000	3.702
Effect Of Domestic Savings	35.159	35	.000	3.709

Field Data (2016)

Table 20: One Sample Test.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.479	82.639	82.639	2.479	82.639	82.639
2	.318	10.585	93.224			
3	.203	6.776	100.000			

Field Data (2016)

Table 21: Total Variance Explained.

investment performance in terms of return on equity, loan repay had impact on investment performance as it reduces cash to invest while domestic savings on other hand had effect of savings which later had influence to investment performance.

The study wanted to investigate whether there are any techniques of credit analysis used before granting cash services to the clients and found out that the loan is paid back by interest rates at 3.50, Are there penalties for investors defaulters 3.72 and central banks CBs take lawful actions when credit is not repaid in time indicated at the 3.86. The findings showed that there was influence of loan repayment on financial performance in banks in Table 10 The study sought to determine the level of significance by one sample t test to test the findings of the study variables and found out that that the variable were less than nor equal to .000 indicated a strong impact on investment performance by the study variables under investigation.

The study wanted to establish the correlation analysis of the study variables and found out that Cash Lending on Business Investment Performance, Loan Repayment on Business Investment and Effect of Domestic Savings on Investment Performance with 3.70, 3.70 and 3.71, respectively this indicated that individual variables are related and affect investment performance as in Table 15.

The study sought to establish the effect of cash lending, loan repayment and domestic savings. The correlation matrix of the variables is shown in the table below which indicated that Cash Lending On Business Investment Performance, Loan Repayment On Business Investment Performance and Effect Of Domestic Savings On Investment Performance with 1, (.994<sup>\*\*</sup> .000) and (.988<sup>\*\*</sup> .000) respectively. In Table 15 the findings is shown that there all the variables were positively correlated to denote that that there is a strong positive relationship between variables. The study revealed that Cash Lending on Business Investment Performance, Loan Repayment on Business Investment Performance and Effect of Domestic Savings on Investment Performance had impact on investment performance.

## Chapter Five

### Summary conclusions and recommendations

**Summary of the study:** The study wanted to examine as to whether important aspects of cash lending management is evaluated and come out the findings Firm undertakes legal action for clients who fails to lend, Evaluation is done on credit worthiness of would be investors,

Time limit is given when clients are to lend, Investors are reminded to cash lend due with their of 3.92, 3.83, 3.78, and 3.58 respectively. The findings showed that every cash lend aspects there was relevant information given in Table 15.

The study wanted to investigate whether loan repayment affect investment performance the determinant of credit analysis used before granting cash services to the clients and found out that the loan is paid back by interest rates at 3.50, Are there penalties for investors defaulters 3.72 and central banks CBs take lawful actions when credit is not repaid in time indicated at the 3.86. The findings showed that there was influence of loan repayment on financial performance in banks.

The study wanted to examine the effect of interest rates on investment performance and the results was indicated in Table 12 which indicated that level of agreement was accepted by the majority on the respondents that interest rates affect investment performance as shown set at 55.6% of the frequency analysis. The study wanted to establish the effect of Domestic Savings on Investment Performance with 3.70, 3.70 and 3.71 respectively this indicated that individual variables are related and affect investment performance as in Table 15.

**Conclusions:** The study sought to examine the effect of Cash Lending on business investment Performance and revealed that to cash lending period was given in the bank and the results indicated that Are there penalties for cash defaulters, CBs take legal actions when lend is not done time frame, In your own view do you accept that cash lending affects business performance and Always cash is lend within the stipulated time. . From the findings the study showed that there all the variables were positively correlated to denote that that there is a strong positive relationship between variables. The study revealed that Cash Lending on Investment Performance had impact on investment performance

The sought to investigate the effect of Loan Repayment on Business Investment Performance and noted that researchers that might be due to situational factors like country level factors, bank level factors and the condition of legal and regulatory framework of the country. Thus, these debates can only be resolved through quantitative analysis on the determinants of loan repayments

The study investigated the effect of domestic savings and found that whether there are any techniques of credit analysis used before granting cash services to the clients and found out that the loan is paid back by interest rates at 3.50, Are there penalties for investors. The study revealed that domestic saving affect performance.

**Recommendation:** The study had three objectives cash lending loan repayment and domestic savings on investment performance. The study recommended that only bank to concentrate on these variables it must improve their investment performance in dealing with interest rates.

The study was dealing with cash lending and investment performance and recommended for proper rates for cash lending to encourage investors in improving investment performance. The study had to investigate the effect of loan repayment on investment and recommended to set appropriate on repayment and finally to adopt the mode of domestic savings to improve investment performance in Kenya.

The study also recommended to establish as to whether any relevant information relates to cash lending period was given in the bank and the results indicated that are there penalties for cash defaulters, CBs take legal actions when lend is not done time frame, The commercial bank

should own cash lending affects business performance and Always cash is lend within the stipulated time. The study recommended that interest rate affect investment performance at a coefficient of determination in the regression model  $R^2=0.995$  implying that 99.5% of change in investment performance model is due to the variables in the study. This also implies that .5% change in investment was caused by variables not under survey.

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