

**RELATIONSHIP BETWEEN RELATED PARTY LOANS AND
BANKRUPTCY PROBABILITY OF COMMERCIAL BANKS IN
KENYA**

BY

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D63/77589/2015

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF THE DEGREE OF MASTER OF SCIENCE FINANCE,
UNIVERSITY OF NAIROBI**

2016

DECLARATION

I declare that this is my original work and has not been presented in any university for the award of degree.

Signed..... Date.....

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

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ACKNOWLEDGEMENT

The completion of this project was not easy. It was not due to the effort of the author alone, but relied on the cooperative assistance of many unseen hands. First and foremost I owe special thanks to God Almighty for seeing me through. I sincerely acknowledge my supervisor Dr. Kennedy Okiro, Department of Finance and Accounting, University of Nairobi for his enabling support and guidance, his never ending patience, goodeye and sharp mind.

DEDICATION

To my parents who sacrificed greatly to start me out in life with an education that did lay the foundation and desire in my heart to pursue greatness.

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LIST OF ABBREVIATIONS

AML Anti Money Laundering

CAR Capital Adequacy Ratio

CBK Central Bank of Kenya

GDP Gross Domestic Product

IAS International Accounting Standards

IMF International Monetary Fund

KDIC Kenya Deposit Insurance Corporation

MM Modigliani and Miller

NIM Net Interest Margin

NPV Net Present Value

RBS Risk Based Supervision

ROA Return on Asset

ROE Return on Equity

SPSS Statistical Package for Social Sciences

ABSTRACT

Commercial banks assume a crucial part in the financial asset allotment of nations. They channel stores from contributors to financial specialists persistently. They can do as such, on the off chance that they produce vital pay to take care of their operational expense they bring about in the proper way. The managing an account part controls in Kenya by the controller, Central Bank of Kenya, have led to increased enforcement of regulations in banking including streamlining operations and reporting. Part of the focus has been related party lending, lending to employees, directors and relations of directors, and the banks' control of their non-performing loan book.

The International Standards of Accounting define a related party as person or element that is identified with the element that is setting up its money related articulations. A man or a nearby individual from that individual's family is identified with a reporting element if that individual: has control or joint control over the reporting substance, has huge impact over the reporting element; or is an individual from the key administration work force of the reporting element or of a parent of the reporting element.

This study seeks to establish the relationship between related party lending and bankruptcy probability in commercial banks in Kenya. A casual plan was embraced as the examination outline real accentuation was on deciding a circumstances and end results relation among related party lending and bankruptcy probability of commercial banks in Kenya. Research populace consisted all the 43 commercial banks in Kenya. The primary data was obtained from published financial statements for a period of three fiscal periods from 2013 to 2015. The data was checked for completeness and analyzed using the statistical package for social sciences (SPSS) package. Tables were used to present the analyzed data.

The study concludes that related party lending is a significant determinant of bank bankruptcy probability. There is a positive correlation between related party lending and bank bankruptcy probability. Related party lending is deemed to include insider and non-performing loans. Commercial banks that are keen on increasing profitability and reducing bankruptcy likelihood should focus more on the levels of insider and non-performing loans that they carry in their books.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Countries rely on commercial banks in terms of allocation of economic resources. The banks do so by moving funds from the depositors to the investors. Banks therefore have to remain profitable and be able to generate income that will sustain their operation costs. This is commonly referred to as sustainable intermediation. In addition to the aforementioned function, commercial banks play a crucial role in terms of growth of an economy and ensure that shareholders reap the rewards of their investments. This therefore attracts additional investment from potential and existing investors which leads to growth of an economy. Conversely, a higher bankruptcy probability may cause a crisis in the economy as it deters potential investors and therefore has a negative impact on the growth of an economy in general(Ongore, 2011).

Lending to related parties is legal and should be done as per the requirements put in place by the Central Bank of Kenya (CBK). Insider lending by commercial banks is governed by Section 11 of the Banking Act, which places limitations on advances, credits and assurances. Insiders regarded as all people (officers, executives, and huge shareholders) and their partners and organizations. All insider lending should be formally answered to CBK, that is, all loaning to the related gatherings should be unveiled to the controller. All insider credits should be completely secured, get full board endorsement, made a manner in which business operates and should also have similar terms and conditions as those accorded to ordinary bank customers. CBK should be

notified of such loans within seven days after approval. Further, the amount lent to one person should not exceed 20 per cent of an institution's core capital and that all insider loans must be less than 100 per cent of the commercial bank's core capital in aggregate (CBK, 2015).

Commercial banks are allowed to conduct business with the insiders as long as they abide by the rules and regulations that have been set aside. Dealings conducted between commercial banks and the insiders can be very beneficial to both parties. However, the issue arises where there is need to differentiate between genuine insider banking transactions and those which may not be prudent or which may involve special treatment being given to the insiders. Research shows that banking crisis caused by illegal insider lending such as loans at zero or significantly low interest rates and baseless directors remuneration that is in excess of industry standards time and again leads to failure by commercial banks. Due to the threats posed by insider lending, transactions between commercial banks and the insiders must be governed by rules and regulations which ensure the safety of the depositors' money (Ngugi, 2001).

The reputation of a bank that misuses its right to engage in insider lending is also harmed aside from it experiencing financial difficulties. This means that the public will no longer be self-assured to deal or transact with a bank that has been caught engaging in illegal insider practices. This is crucial because how the market perceives the bank is central to whether the bank can continue operating as a going concern. Commercial banks therefore have to maintain a reputation of being ethical in their actions especially with regard to insiders (Hardy, 1998).

A bank's corporate administration procedures ought to exhaustively address insider exercises. The top managerial staff must show authority by guaranteeing a culture that does not endure exploitative conduct or circumvention of directions, and by embracing and overseeing solid composed arrangements that nearly represent the relationship between a bank and all insiders.

The board should likewise guarantee that bank administration executes a procedure to screen and approve consistence with these strategies. Banks may extensively characterize insiders to incorporate all bank workers. Certain lawful arrangements may vary, in any case, in the way they characterize insider and utmost the definition to incorporate, for instance, official officer, executive, or foremost shareholder and every single "related enthusiasm" of these people. In this manner, it is critical to figure out who qualifies as an insider for reasons for the legitimate arrangement or approach being considered (Wen, 2010).

1.1.1 Related Party Loans

The International Standards of Accounting define a related party as an individual or body related to organization making its monetary articulations. It refers to extent to which one has control or critical impact over organization. Person may be part of important administration of the organization in case it is a subsidiary.

This study shall strictly focus on key management personnel as related parties and the effect that of the loans issued to them has on bankruptcy probability of commercial banks. Related party loans are also commonly referred to as insider loans and insider lending is at the point when a bank makes a credit to at least one of its own executives. The role of key management involves; designing, guiding and supervising the undertakings of the organization [IAS 24.9]. A related party business deal is an allocation of funds, assets, or responsibilities irrespective of whether a fee is charged. [IAS 24.9] Business dealings among related gatherings incorporate buying and selling of products and enterprises.

Bank officers and chiefs are permitted to obtain cash from the organization they supervise, inasmuch as they take after the principles and don't pick up at the bank's cost by manhandling their energy. There are also cases in which management personnel obtain loans to finance other

companies. The unique association existing between the related parties leads to a possible clash with the interests of the shareholders. This was seen in the Enron scandal where it was revealed that the illegal insider dealings were related-party transactions with entities that had been created as special purpose vehicles but were actually used as an avenue to commit fraud (Ongore, 2011).

1.1.2 Bankruptcy Probability

Bankruptcy probability can be assessed in various ways. In this study we will focus on profitability and liquidity as our key indicators of bankruptcy probability of commercial banks in relation to the subject of insider loans. The core business of commercial banks like any other business organisation is to make profit. This in effect means that the policies put in place and the actions of the bank are aimed towards achieving this goal of making profit. In addition to being profitable, the other goals that banks like other businesses have include for instance socially, creation of employment opportunities and economically driving investments within a country. In this study we shall however focus on the ultimate objective of profit making. We quantify profitability in relation to banks using different ratios such as Net Interest Margin, (ROE) and (ROA) the commonly utilized gainfulness proportions (Murthy, 2003).

(ROE) is profitability proportion quantifying profit made by entity in relation to funds injected by the shareholders in form of equity and this is indicated in the announcement of budgetary position of the entity. ROE is essentially what the shareholders expect to receive as result of their investment in a company. A high ROE shows that a company is able to create cash inside the company and is thus able to sustain its operation costs other than relying on cash injected by the shareholders. This in turn means that the company is more likely to be profitable as a result of having a high ROE. The return on equity can also be computed as

Net Income after Tax over Total Equity. It signifies the proportion of yield made on the monies spent or put in the commercial bank by its investors. ROE also shows the degree of efficiency and effectiveness to which the people tasked with running the bank use the funds invested by the owners of equity. It is therefore concluded that a higher ROE shows that the people charged with running the bank's activities are efficiently managing the owners' capital that has been injected into the banks (Khrawish (2011)).

Another main profitability ratio used in reference to banks is Return on Asset (ROA). This is computed as Total Income over Total Asset (Khrawish, 2011). It demonstrates the capacity of company to create profits through use of resources which belong to the company. This means that ROA shows extent to which a bank can use its available possessions to earn returns for the shareholders. It shows the degree of effectiveness to which the people tasked with running the bank in creating profit after tax from all the possessions available to the bank (Khrawish, 2011). An increase in Return on Asset reflects that a bank has increased the effectiveness of utilizing its available possessions (Wen (2010)).

(NIM) is computed as interest income minus the interest paid. In terms of a bank therefore, NIM refers to interest income earned by the commercial bank through for instance loans to customers less the interest paid to stakeholders such as customers who have fixed deposits with the bank. It is the difference between that which the bank makes from lending and that which it pays to its lenders over the assets from which returns were made. Net Interest Margin is computed by net interest income over aggregate earnings resources (Gul, 2011). It calculates the contrast among premium pay earned by banks from loaning and premium paid to moneylenders. It shows the effectiveness and price of service delivery by banks, that is, financial intermediation. NIM increase leads to profit increase of banks which also shows that the banks are well established when it comes to being affected by market forces. Investors therefore consider NIM to be an

important ratio in determining how profitable a bank is. Nonetheless, an increase in NIM may send negative signals to the market, that is, it may show that the loans advanced translate to a high provision for bad debt due to increase rate of default by borrowers (Khrawish, 2011).

1.1.3 Commercial Banks in Kenya

The term commercial bank is used to refer to monetary establishments that are in the business of taking deposits, issuing of loans and providing other financial intermediation facilities. The core business of commercial banks is generally lending and taking deposits (Ongore, 2011). The start of commercial banking in Kenya is dated back to the late eighteenth century where the first commercial bank to be established was Kenya Commercial Bank formally called Grindlays Bank (Njuguna, 2009). Notable however is the fact that the Central Bank of Kenya (CBK) is not regarded as a commercial bank and that commercial banks are institutions that conduct and offer banking services in the country (CBK, 2013).

The function of the (CBK) is to oversee and control commercial banks through putting in place rules and regulations that guide the actions of the banks. Appendix 1 shows that Kenya has forty two commercial banks and one mortgage finance company. This makes a total of forty three entities in which thirty nine commercial banks and the mortgage finance company are not publicly owned whereas the Government has direct in the other three banks. In terms of ownership twenty five out of the thirty nine banks and the mortgage finance company are not publicly owned meaning that the majority owners of equity are residents of Kenya but the remaining fourteen banks do not have the majority owners of equity as residents of Kenya.

1.1.4 Insider Loans and Bankruptcy Probability

Research on the relationship between insider loans and bankruptcy probability has emerged as a major subject of discussion that touches on corporate governance in relation to financial

institutions. There is a high relation among bank disappointment or bankruptcy and loaning to insiders (Ongore, 2011).

West Bank based in America, is an example of a bank where legal action was taken against the bank's key management personnel due to improper and unlawful loans to insiders. Millions of dollars were advanced on comfortable and possibly unlawful terms to a portion of the bank's chiefs and its top loaning official. The bank offers a prime case of the potential for mishandle by those running a little group bank, especially when controllers depend on a bank's own particular administration to reveal any insider exchanges. The greatest recipients of West Bank's liberal insider loaning were its director, Louis Weir, and its top loaning official, Brett Green. By and large, they and their ventures got in any event \$9.9 million in land credits from 2002 to 2007, records appear. Amid Green's residency at West Bank, he and his outside land ventures got in any event \$5.4 million in credits from the bank, open records appear. What's more, his business accomplices profited from in any event \$8 million in extra advances either to them or their organizations, records appear. (Ongore, 2011)

1.2 Research Problem

There has been a wave of collapse of commercial banks due to insider lending, that is, directors and senior management lending themselves hefty loans which are in detrimental to the owners of equity who injected capital into the bank. This therefore leads to an upward trend in the bankruptcy probability of the banks. Insider abuse, which may be actual or perceived, may greatly affect the capability of a bank to function in a manner that does not harm the financial position of the bank and in effect, that of its depositors. Any hypothesis scrutinizing the trustworthiness or respectability of the bank or its insiders, however unwarranted, can prompt to the bank's insolvency, its capacity to draw in assets from people in general, institutional providers, and reporter banks. Indeed, even the presence of insider mistake could prompt to loss

of subsidizing sources and store withdrawals and drive the bank to rashly discard resources at unsatisfactory misfortunes to look after liquidity. Loaning to non-financially sound insiders, offering improper terms to insiders, or generally permitting a domain helpful for insider mishandle increment the liquidation likelihood and infringement of law and direction. Rebelliousness with these necessities or security and soundness principles can uncover the bank and its insiders to genuine outcomes, including requirement activity. At the point when the bank is nearly connected with an insider or an organization claimed by an insider, regardless of the possibility that the bank and insider don't execute business together, the bank may endure notoriety chance or other damage if the insider or the insider's business encounters money related troubles or gets antagonistic attention. Any harm to the bank's notoriety, or any ramifications of insider manhandle or misrepresentation, may antagonistically influence the certainty of the bank's shareholders, clients, providers, and money related accomplices. Thus, the bank's client base could disintegrate, really influencing the bank's profit, capital, establishment or venture esteem and overall increase its bankruptcy probability

Internationally, in the United States, an example is the banks in Florida that went under due to abuse of insider lending by management. The banks' leaders were not prudent in their dealings. Investigations revealed that the banks' key management personnel did not abide by the law, they falsified financial statements and advanced very hefty loans to the directors. Further, the loans advanced to the insiders and the unauthorised business deals were detrimental to the shareholders and to the public at large. The governing body of commercial banks in Florida got wind of this but did not act swiftly. However, when the finally took action, the key management personnel in the banks concealed crucial information, edited financial statements and minutes of board meetings to avert the real problem. The banks did not abide by the regulations put in place and

disregarded notices from the governing body as they continued to lend hefty insider loans (Wen, 2010).

West Bank in the United States is another example of a bank that went under and its leaders taken to court by the Federal Deposit Insurance Corp (FDIC) in order to recoup the funds that were frequently advanced illegally to the insiders. Millions of dollars were lent on comfortable and possibly illicit terms to a portion of the bank's chiefs and its top loaning official (Hardy, 1998).

Locally, Kenya has witnessed bank failure since the late 1980s (Kithinji, 2007). In recent times, the CBK placed Imperial Bank under receivership with (KDIC) selected as receivers of Imperial Bank Limited for not more than a year. This was as a result of anomalies and misconduct by management which jeopardized the cashflow position of the entity in that, it was not capable of settling its obligations as and when they fell due in addition to misuse of the customer deposits for their own personal gain with no regard for the interest of the shareholders.

Dubai Bank Kenya limited was also put under statutory management after it breached daily cash-reserve-ratio requirements which attracted a penalty for non-compliance. This was as a result of the constantly declining state of the reserve ratio relating to cash in the bank. In addition, it was unable to settle its debts to suppliers and lenders hence was deemed not able to continue operating as a going concern. Another bank that has been placed under receivership in Kenya in recent times is Chase Bank Limited due to a bank run which caused the bank to experience liquidity problems as customers withdrew their deposits in large numbers after it was revealed in the published audited financial statement that the directors had created special purpose vehicles through Sharia Banking in which customer deposits had been used externally for investment purposes by the directors but the interest generated by the investments was not subsequently

recognised in the books of Chase Bank. As a result, the initial cost of investment as well as the interest earned was disclosed in the financial statements as a loan to the directors. Chase Bank was however later reopened in the same month.

Investigation is done on relation among related party loans and bankruptcy probability of commercial banks. This will enable banks to take corrective action in due time. When threats of related party loans can be predicted, anticipated and appropriate measures taken, this will ensure soundness of the Kenyan banking system.

1.3 Objective of the Study

Study motive is determining relation among related party loans and bankruptcy probability of commercial banks.

1.4 Value of the Study

It contributes toward making of more strict policies by the regulator of commercial banks in Kenya, CBK, as part of tightening supervision in the wake of a series of bank failures which has caused panic among some institutions. Internally, the commercial banks will also find this study useful in that it will recommend policies and practices that should be put in place in order to ensure compliance with the guidelines set up by the CBK. The study will also unveil the main controllable causes of failure of commercial banks in Kenya due to related party loans such as lack of effective credit policies for insider loans and ways to mitigate against such risks so as to reduce bankruptcy probability.

The study is expected to add to the current assortment of learning in relation to related party loans and bankruptcy probability of commercial banks. This will help them understand more the implications that insider loans have on the bankruptcy probability of commercial banks and

also suggest ways to improve later studied outcome based. It is also likely to benefit scholars who may wish to pursue further studies in this area.

The study will find this report useful in analysing the financial health of banks before investing in them. They will be assured of the safety of their deposits with banks and detect early signs of failure of their banks as a result of insider lending.

This report will provide recommendations for bank managers and directors will be able to know what measures to put in place in order to ensure their banks are not placed under receivership as a result of insider lending.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Part reviews theories similar to insider lending. Consist of theories that try to explain the role of management and directors (insiders) in reducing bankruptcy probability of the commercial banks. The literature review analyses existing knowledge in line with the research. The chapter goes deeper into looking at the prior research done on the same subject to obtain fundamental information regarding the topic. The exact studies have been checked on, relation among related party loans and bankruptcy probability of commercial banks studied and the chapter finalized by a conclusion.

2.2 Theoretical Literature Review

Management and directors act as agents of the principal who are the shareholders and have the fiduciary duty which is based largely on meeting the concerns and needs of the owners of equity injected into a company. In addition, owing to information asymmetry whereby management and directors do not disclose some information affecting the financial position of the bank, investors and depositors are not able to make well informed decisions with regard to the safety of their money.

Further, in terms of capital structure, a bank that finances its' activities largely through debt as opposed to equity results in high gearing which is not favorable among potential investors and therefore the bank is likely to experience liquidity problems which may result in it being placed under receivership. The following is an in-depth look at the theories which show the relationship between related party loans and bankruptcy probability of commercial banks in Kenya.

2.2.1 Agency Cost Theory

This theory states that we have types of agency costs which are categorized into two that is, the debt and equity agency costs. The latter caused by interest clashes concerning management and the owners of equity in a company while the former is caused by clashes of interest concerning the owners of equity and the individuals or institutions that lend to the company. Management may be focused on achieving only their interests which may not correspond to the objectives of the company. The shareholders therefore have to regulate the actions of management which then translates to agency costs of equity. On the other hand, when a company approaches financiers to inject capital into the business, the rate of interest used by the financier will depend on the level of default rate of the company. Management could therefore be tempted to engage in window dressing in order to make the company appear favorable. The financiers therefore have to regulate the actions of management which then translates to agency costs of debt (Jensen, 1976).

Since Jensen and Meckling published in 1976 their work on agency costs and ownership structure, the relevance and impact of conflicts of interest between firms insiders on the one hand and other firms stakeholders on the other hand has been most investigated theme in the field of corporate finance, as Shleifer and Vishny (1997) survey on corporate governance well illustrates. While empirical studies have mainly focused on the clash in needs concerning insiders and owners of equity who are not major (Gompers, 2003) conflicts exist as well between insiders and creditors. Empirical studies on this conflict have generally set their focus on wealth changes associated to certain events (Warga 2003; Billett et al. 2004) or investigated the effect of structures of good governance on the worth of corporate bonds (Klock , 2005).

A company's capital structure is determined by agency costs, which as per the theory on agency costs comprises the costs of debt and equity. Costs connected to the latter consist of: i) owners of equity regulating the expenses; ii) management binding expenses; iii) decrease in returns to the

owners of equity as a result of management focusing on their own personal interest which do not correspond to the objective of the company. Management may focus on project with higher net present value with a specific end goal to boost the profit of equity owners. However, such project may not always result in high return and hence the negative impact will also be borne by the lenders which then translate into increase in the cost of debt as the lenders attempt to alleviate the impact of the loss. Additionally there are costs which the lenders will incur such as the expenses relating to regulating the activities of the borrower for instance putting in place conditions in the loan covenant that the organization must keep up a specific level of working capital. It is therefore clear that there must be a trade-off considering two types of agency costs discussed and it clash comes up as a result of differing concerns of the owners of equity and management (Jensen and Meckling, 1976)

2.2.2 Asymmetric Information Theory

This theory states that management of a company are privy to facts that are undisclosed to the public including the owners of equity. As a result, leverage choice under this framework is either utilized to indicate to the public facts that may only be known to the management or made to allay the inadequacies of the investment choices brought about by the asymmetry of information. Management sometimes misuse the power which comes from having such information for their own selfish interests which do not correspond to the objectives of the company (Myers, 1984).

Management sometimes prefer debt as means of financing the activities of the company in order to evade the inadequacies that come with choices of investments that may lead to information asymmetry. This means that the management are privy to facts that have not been disclosed to the public. As a result of this theory, a company financing a venture through the use of equity will realise that the equity will not be overpriced in the industry. The effect is that any other additional equity by the company will not be overpriced. As a result of this theory also, it should

be noted that management will be more concerned about the needs of the current owners of equity as opposed to the potential ones as the latter would require them to issue additional equity which will be underpriced in the market (Myers and Majluf, 1984).

2.2.3 Pecking Order Theory

It states that management will normally have certain inclinations when it comes to selecting the source of funds to back their activities (Myers and Majluf, 1984). Management will however be more inclined to choosing retained earnings as opposed to borrowed funds, short-term borrowed funds as opposed to long-term borrowed funds and borrowed funds as opposed to equity.

Correcting the information asymmetry can be done by utilizing retained earnings and opposed to debt to finance the activities of a company. This is because additional shares is considered a more expensive option. Therefore, companies with high asymmetric information are encouraged to raise capital through the use of for instance fixed deposits in order to evade the consequences of having equity that is not overpriced in the market (Myers and Majluf, 1984).

This theory states that companies are more inclined to selecting avenues to finance their businesses in starting with retained earnings, then borrowing of funds then issuing of additional shares including a rights issue. Research has shown that there is information asymmetry concerning management and the public including the owners of equity. Further, management are privy to facts about the value of a company that is not known by potential investors and that management would prefer existing owners of equity rather than issuing additional shares to new shareholders as this would result in the shares not being overpriced in the market (Myers and Majluf, 1984).

2.2.4 Modigliani - Miller Theorem

This theory was spear-headed by Modigliani and Miller back in the 1950s and focused on the worth of a company and the implications that the structure of capital used by had on it. The worth of a company is however not moved in a seamless capital market as it is deemed to be operating in perfect conditions. This therefore means that the company's choice as to whether it should use debt or equity to finance its activities in a seamless capital market will not have no impact on the worth of the company. The forerunners of this theory suggested that a company is better off using borrowed funds due to the tax implications involved. This is because of the advantage that utilizing borrowed funds has of attracting tax shields as opposed to raising capital through the issue of additional shares. This means that a company will incur less tax through using borrowed funds as opposed to issuing additional shares to potential and existing shareholders. The cornerstone of this theory is that utilizing borrowed funds actually results in an increase in the worth of a company (Modigliani and Miller, 1963).

The originators of this theory showed that the worth of a company would not be affected by the choice of financing its activities using borrowed funds or equity by applying some conventions. This theory purports that in a seamless capital market, information asymmetry does not exist. This means that the decision to use borrowed funds or equity is therefore unrelated and can easily be substituted. Further, this also implies that the company avoids incurring costs such as dealings charges. If we ignore the important fundamentals of this theory, then capital structure becomes something that would affect the worth of a company (Modigliani and Miller, 1958).

2.3 Determinants of Bankruptcy Probability

In terms of categorization, the causes of bank bankruptcy probability are examined under two major categories, that is, specific and macroeconomic factors (Al-Tamimi, 2010, 2005). They

stand as basics governing outcome. The former remain to be the bank features that upturn the bankruptcy probability. Management choices are mainly what impact what we refer to as the internal factors. Conversely, the features which are not internal, that is features which relate to an industry or even country cannot be regulated by a company therefore such features will have an implication of the profitability of a company (Oloo, 2010).

In as much as bankruptcy probability of commercial banks in Kenya has declined over the last score there are still some banks that are not making profit (Oloo, 2010). Research done over the years has depicted that bankruptcy probability of commercial banks is impacted by internal and external features (Flamini, 2009).

2.3.1 Capital Adequacy

One internal variables have effect on extent that a bank makes profit include capital. This is defined as the money that is at the disposal of the bank if it were to suffer hostile conditions in the market, that is, the money would enable to continue financing its activities and as a result it would continue operating as a going concern (Athanasoglou et al. 2005). This is paramount because a bank cannot rely fully on customer deposits in order to sustain its operation costs. It also ensures that the bank can survive the upturns and downturns which plague the marketplace from time to time (Diamond, 2000).

Further, it should be noted that as a result of banks aiming to maintain a certain level of capital to survive the downturns, banks will often avoid acquiring debt and instead utilize retained earnings as it costs less and would have less damaging implications in case the market was to suffer shocks as compared to if it used debt. A good example is increase in interest rates would mean that the cost of debt would increase, conversely, the same increase would have little impact if the company had used retained earnings.

Dang (2011), the sufficiency of capital is judged on the premise of (CAR). Capital sufficiency proportion demonstrates the interior quality of the bank to withstand misfortunes amid emergency. Capital sufficiency proportion is specifically corresponding to the versatility of the bank to emergency circumstances. It has additionally an immediate impact on the gainfulness of banks by deciding its development to dangerous yet productive endeavors or ranges (Sangmi, 2010).

2.3.2 Asset Quality

The bank's advantage is another bank particular variable that influences the productivity of a bank. The bank resource incorporates among others current resource, credit portfolio, altered resource, and different speculations. Regularly a developing resource (measure) identified with the age of the bank (Athanasoglou, 2005). As a rule the credit of a bank is the significant resource that produces the real share of the banks pay. The nature of credit portfolio decides the gainfulness of banks. The credit portfolio quality has an immediate bearing on bank productivity. The most astounding danger confronting a bank is the misfortunes got from reprobate credits (Dang, 2011).

Accordingly, nonperforming advance proportions are the best intermediaries for resource quality. Diverse sorts of monetary proportions used to contemplate the exhibitions of banks by various researchers. It is the significant worry of every single business bank to keep the measure of nonperforming advances to low level. This is so since high nonperforming advance influences the benefit of the bank. In this way, low nonperforming credits to aggregate advances demonstrates that the great strength of the portfolio a bank. The lower the proportion the better the bank performing (Sangmi, 2010).

2.3.3 Management Efficiency

Administration Efficiency is one of the key inward components that decide the bank productivity. It is spoken to by various monetary proportions like aggregate resource development, advance development rate and income development rate. However, it is one of the edifices subject to catch with monetary proportions. In addition, operational effectiveness in dealing with the working costs is another measurement for administration quality. The execution of administration is frequently communicated subjectively through subjective assessment of administration frameworks, hierarchical train, control frameworks, nature of staff, and others. However, some money related proportions of the budgetary explanations go about as an intermediary for administration effectiveness. The ability of the administration to send its assets proficiently, wage amplification, diminishing working expenses can be measured by monetary proportions. One of this proportions used to gauge administration quality is working benefit to pay proportion (Sangmi, 2010).

The higher the working benefits to aggregate salary (income) the more the productive administration is as far as operational effectiveness and wage era. The other critical proportion is that intermediary administration quality is cost to resource proportion. The proportion of working costs to aggregate resource is required to be contrarily connected with benefit. Administration quality in such manner, decides the level of working costs and thusly influences benefit (Athanasoglou, 2005).

2.3.4 Liquidity Management

Liquidity is another component that decides the level of bank execution. Liquidity alludes to the capacity of the bank to satisfy its commitments, fundamentally of contributors. (Dang,2011)

satisfactory level of liquidity is decidedly related with bank productivity. The most widely recognized monetary proportions that mirror the liquidity position of a bank as indicated by the above creator are client store to aggregate resource and aggregate advance to client stores.

Different researchers utilize diverse money related proportion to quantify liquidity.

For example (Ilhomovich,2009) utilized money to store proportion to gauge the liquidity level of banks in Malaysia. Notwithstanding, the study directed in China and Malaysia observed that liquidity level of banks has no association with the exhibitions of banks (Said, 2011).

2.3.5 Macroeconomic Factors

The macroeconomic approach steadiness, Gross Domestic Product, expansion, loan fee and political shakiness are likewise other macroeconomic factors that influence the exhibitions of banks. For example, the pattern of GDP influences the interest for banks resource. Amid the declining GDP development the interest for credit falls which thusly contrarily influence the productivity of banks. Unexpectedly, in a developing economy as communicated by positive GDP development, the interest for credit is high because of the way of business cycle. Amid blast the interest for credit is high contrasted with retreat (Athanasoglou, 2005).

Similar creators state in connection to the Greek circumstance that the relationship between swelling level and banks productivity is stayed to be easy to refute. The course of the relationship is not clear (Vong, 2009).

2.4 Empirical Literature Review

(La Porta,2003) contend that insider loaning permits financiers to plunder their own particular banks and thusly negatively affects development. The Mexico bank emergency of 1995-1998 demonstrated that advances to insiders were given on more ideal terms than outcasts. Besides, default rates on related gathering credits were 35% higher and recuperation on related gathering advances 30% lower than inconsequential gathering. It is along these lines contended this is confirmation that related loaning is a type of plundering by bank chiefs and that related loaning was one of the key purposes behind the managing an account emergency in Mexico.

A key supposition of (La Porta,2003) is that financiers take after the transient methodology of plundering their own particular banks as the share of their benefits in their own particular getting is more than the share of benefits in their own banks. Insider loaning was not the model of loaning all through pre-common war America. Early business banks in New York and Pennsylvania did not take after the insider loaning model but rather honed 'outcast loaning'. It is contended that however these banks utilized an alternate loaning model, they were as successful as New England banks in initiating monetary advancement. Untouchable loaning rehearses created partially on the grounds that shares of banks were generally held additionally in light of the fact that credit data about borrowers was accessible to the banks (R. Wright, 1998). This therefore shows that one of the root causes of the negative impact of insider loans is indeed information asymmetry.

There is expansive agreement that banks in creating nations take part in insider loaning or related loaning (Maurer and Haber, 2007). It is subsequently more fitting to take a more extensive perspective of corporate administration to incorporate investors as providers of fund and expand the trustee obligations of chiefs to shareholders as well as contributors (Arun and Turner, 2004).

The exceedingly utilized nature of bank monetary records, the inalienable bungle between resource obligation structures and the state financed store protection plots in many nations, implies that bank executives should be held to a more extensive standard of corporate administration (Macey and O'Hara, 2001). Moreover, as bank disappointments are expensive to the whole economy, it is contended that the broadest perspective of corporate administration is generally fitting.

Insider loaning is frequently false in light of the fact that managing an account enactment more often than not forces confines on the volume of insider credits which banks can broaden. Insider advances represented 65 for every penny of the aggregate credits of the four nearby banks exchanged in Nigeria in 1995, for all intents and purposes all of which was unrecoverable. Half of the credit arrangement of one of the Ugandan neighborhood banks assumed control by the Bank of Uganda in 1995 had been stretched out to its chiefs and representatives (Macey & O'Hara, 2001)

According to Brownbridge (1998), the single greatest supporter to the terrible advances of a large number of the fizzled nearby banks was insider loaning. In at any rate half of the bank disappointments, insider advances represented a significant extent of the awful obligations. The majority of the bigger neighborhood bank disappointments in Kenya, for example, the Continental Bank, Trade Bank and Pan African Bank, included broad insider loaning, frequently to lawmakers. The risk postured by insider loaning to the soundness of the banks was exacerbated in light of the fact that a considerable lot of the insider advances were put resources into theoretical ventures, for example, land improvement, broke huge credit introduction restricts, and were stretched out to tasks which couldn't produce transient returns, (for example, lodgings and malls), with the outcome that the developments of the bank's benefits and liabilities

were impulsively confounded. Hecites three strengths behind insider loaning and records them as political weight, under-capitalization, over focus in possession.

The high occurrence of insider loaning among fizzled banks recommends that issues of good peril were particularly intense in these banks. A few variables added to this. To start with, legislators were included as shareholders and chiefs of a portion of the neighborhood banks. Political associations were utilized to get open area stores: a hefty portion of the fizzled banks, especially in Kenya, depended vigorously on discount stores from a little number of parastatals. Because of political weight, the parastatals which made these stores are probably not going to have made an absolutely business judgment with regards to the wellbeing of their stores. Besides, the accessibility of parastatal stores diminished the need to prepare reserves from people in general. Thus these banks confronted little weight from investors to build up a notoriety for wellbeing. Political associations additionally encouraged access to bank licenses and were utilized as a part of a few cases to weight bank controllers not to make a move against banks when infringement of the managing an account laws were found. Every one of these elements decreased the limitations on indiscreet bank administration. Likewise, the banks' dependence on political associations implied that they were presented to weight to loan to the government officials themselves as an end-result of the help given in getting stores and licenses. A few of the biggest insider advances made by fizzled banks in Kenya were to noticeable government officials (Brownbridge, 1998)

Second, the vast majority of the fizzled banks were undercapitalized, to a limited extent on the grounds that the base capital prerequisites in drive when they had been set up were low. Proprietors had little of their own assets at hazard ought to their bank fall flat, which made an extensive asymmetry in the potential dangers and prizes of insider loaning. Bank proprietors could put the bank's stores in their own high-chance ventures, realizing that they would make

vast benefits if their undertakings succeeded, however would lose little of their own cash on the off chance that they were not productive. In Nigeria, for example, of the thirteen upset nearby banks assumed control by the Commercial Bank of Nigeria in 1995, all with the exception of one had required paid-up share capital (Brownbridge, 1998)

The third variable adding to insider loaning was the unnecessary convergence of possession. In a significant number of the fizzled banks, the greater part of shares were held by one man or one family, while chiefs needed adequate freedom from obstruction by proprietors in operational choices. A more expanded proprietorship structure and a more autonomous administration may have been required to force more noteworthy limitations on insider loaning, on the grounds that at any rate a portion of the chiefs would have remained to lose more than they picked up from insider loaning, while directors would not have needed to chance their notorieties and vocations (Brownbridge, 1998)

One of the conceivable purposes behind the control for partition of proprietorship and administration is diminish levels of insider loaning. It is contended that control of insider loaning through strict supervision or directions that require elevated amounts of capital duty by shareholders will probably be a more compelling device than constrained partition of proprietorship and administration. Studies show that a framework with high capital proportions is one of the conditions under which insider loaning is not vindictive (Maurer, 2007).

2.5 Conceptual Framework

The conceptual structure shows theorized relation among (related party loans) and (bankruptcy probability). It is presumed that related party loans affect the bankruptcy probability of commercial banks in Kenya.

Relation among the two variables is expected to be influenced by the macroeconomic factors such as inflation which are beyond the control of commercial banks. As described previously in the related literature review parts, bankruptcy probability of commercial banks can be affected macroeconomic factors such as: arrangement strength, GDP, expansion and financing cost. The study variables are conceptualized into a framework as illustrated in Figure 1 below.

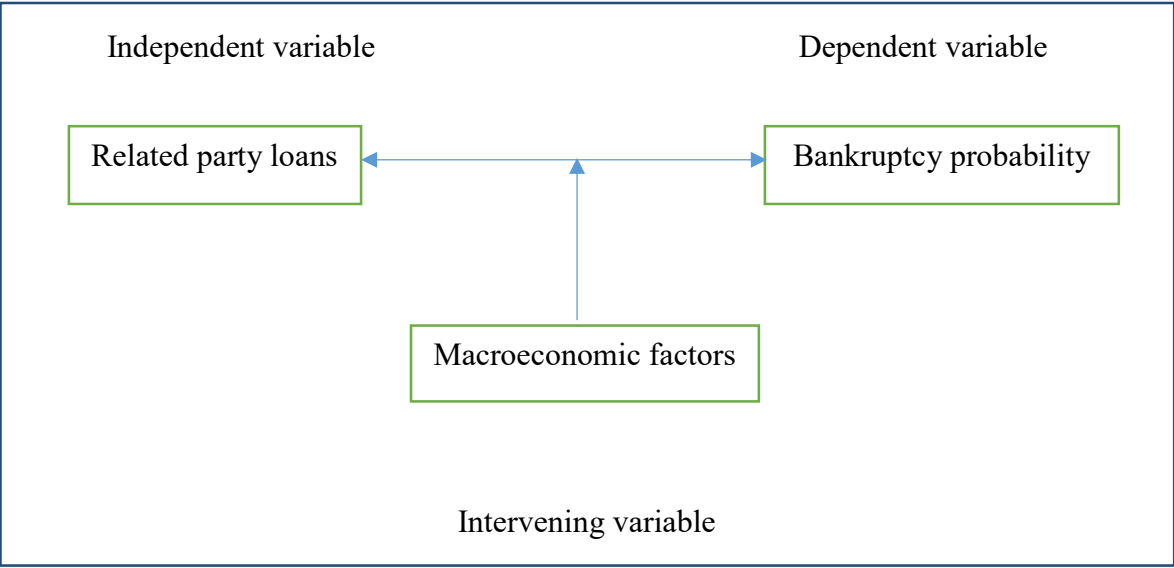


Figure 1: Conceptual Framework

2.6 Summary of Literature Review

Various research have been conducted on causes and remedies of banking crises with the major cause of bank failure being attributed to non-performing loans. However, related party loans is becoming a major cause of collapse of commercial banks in Kenya following Dubai Bank and Imperial Bank being placed under receivership mainly due to huge number related party loans.

Bank directors have a fiduciary responsibility and legal obligation to ensure that, above all, depositors’ funds are safe and banks’ risk management oversight ensures customer confidence and contributes to the growth and stability of the banking industry. Reputation risk should be placed high on bank directors’ agendas to ensure client loyalty and obligation. Risk management policies should be up-to-date with internal controls as well as Anti Money Laundering (AML)

practices that insulate the bank against possible frauds or collusions. Surviving the looming banking crisis in Kenya as a result of related party loans will depend on the deposit base of the bank, but in reality, no bank can survive a run in circumstances as seen with the case of Chase Bank in Kenya, and hence it is more efficient to be proactive and maintain a balanced customer base. Directors should keenly get more involved and watch the bank's capital adequacy and liquidity management. Governor of Central Bank of Kenya declared that Kenya's banking system is sound and added that the Central Bank would not tolerate bad actors. However, banks must not wait for the regulators to step in. The front line responsibility for this oversight falls on the shoulders of bank directors.

The new governor is demanding better corporate governance. He is also considering increasing capital reserve requirements and restricting new banking licenses. Such measures are not surprising considering that Kenya has many more banks (42) than, for example, Nigeria (22), which has four times Kenya's population.

Nonperforming loans to customers have in the past been attributed as the major cause of collapse of banks. This study therefore will be done to fill knowledge crevice by acknowledgingrelationship among related party loans andbankruptcy probability of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Part outlines methodology to be used in research. It depicts design research, populace target, data collection, analysis, viability and validity method.

3.2 Research Design

(Kerlinger, 1986) examine outline is the arrangement and structure of examination so considered to acquire answers to research questions. (Mugenda and Mugenda, 1999) examine plan is the framework plan or plan that is utilized to create answers to the exploration issues. It provides a framework for planning and conducting a study. The descriptive methodology was utilized. It was most preferred because the study used quantitative statistical data to show relation among related party loans and bankruptcy probability of commercial banks in Kenya.

3.3 The Population

(Cooper, 1995) characterize populace as the aggregate accumulation of components about which researcher wishes to make a few surmisings. Component is the subject on which the estimation is being taken as per (Cooper, 2003).

The target population in this the study consisted of all the 43 commercial banks registered and licensed under the banking act and were in existence as at 31st Dec 2014. A census survey was carried out on all commercial banks therefore there was no need for sampling.

3.4 Data Collection

The study was based wholly on secondary data available in form of published monetary statements for commercial banks for time span three years. Other sources of secondary data are reports

periodically released by the Central Bank of Kenya, statistical documents, banking surveys of various years; Kenya National Bureau of Statistics publications.

Resource nature of the bank's benefit is one of the bank particular factors that influences the gainfulness of a bank. The bank resource incorporates among others current resource, credit portfolio, altered resource, and different speculations. Regularly a developing resource (estimate) identified with the age of the bank (Athanasoglou et al., 2005). As a general rule the advance of a bank is the real resource that produces the significant share of the banks pay. Advance is the significant resource of business banks from which they produce salary. The nature of advance portfolio decides the productivity of banks. The advance portfolio quality has an immediate bearing on bank productivity. The most elevated hazard confronting a bank is the misfortunes got from reprobate credits (Dang, 2011).

3.5 Data Analysis

Data analysis is defined as the whole process, which starts immediately, after data collection and end at point of interpretation of the processes results. The data was analyzed through coding in a spreadsheet where the researcher used descriptive statistics to present the rates of independent variables in tables and charts. A regression was run to determine the coefficients of the independent variables in relation to the dependent variable. It utilized (SPSS). After information has been analyzed, the exploration discoveries was displayed utilizing recurrence tables, pie outlines and visual charts.

The research was utilized a solitary relapse condition way to deal with break down the effect of related party credits on bankruptcy probability of commercial banks.

The equation is $Y = a + b_1X_1 + b_2X_2$ Where

Y is dependent variable, bankruptcy probability of commercial banks (ROA = Net Income / Total Assets)

a is the constant

b is the regression coefficient

X_1 and X_2 = Control variables

X_1 represents insider loans (Insider Loans / Total loans)

X_2 represents asset quality (Nonperforming loans / Total Loans)

Several regressions were run with the primary one being profitability and related party loans.

Measurement of insider loans in commercial banks in Kenya was done using two common ratios used to measure by the CBK. The sum loaned to one individual ought not surpass 20 for each penny of an establishment's center capital and that all insider credits ought not surpass 100 for each penny of the center capital in total (CBK, 2015).

Measurement of asset quality was done since as a rule the credit of a bank is the real resource that produces the real share of the banks wage. The nature of credit portfolio decides the productivity of banks. The loan portfolio which includes insider loans has an immediate bearing on bank gainfulness. The most elevated hazard confronting a bank is the misfortunes got from reprobate credits which includes insider loans. This is so since high nonperforming insider credit influences the benefit of the bank. In this manner, low nonperforming insider advances to aggregate credits demonstrates that the great wellbeing of the portfolio a bank. The lower the proportion the better the bank performing (Sangmi, 2010).

3.6 Data Validity and Reliability

The data used was valid for the study as we were able to get a regression to decide the coefficients of the autonomous factors in relation to the needy variable. It utilized (SPSS). Also information helped in determination of the correlation of relationship between related party loans and bankruptcy probability of commercial banks. The sources are legitimate. The data was also viable as it was possible to collect the data from audited monetary articulations of different commercial banks hence making the study practicable and feasible.

3.5 Test of Significance

The techniques for deduction used to support or reject claims in view of test information are known as trial of hugeness. Once secondary data was gathered, statistical inference was done to evaluate prove for the claim about the populace in this study.

Each trial of noteworthiness starts with an invalid speculation, H_0 . H_0 speaks to a hypothesis that has been advanced, either in light of the fact that it is accepted to be valid or in light of the fact that it is to be utilized as a reason for contention, yet has not been demonstrated. The invalid theory (H_0) for this study was that there is no relationship between related party loans and bankruptcy probability of commercial banks in Kenya.

The elective theory, H_a , is an announcement of what a measurable speculation test is set up to set up. Option theory (H_a) for this study was that there is relation among related party loans and bankruptcy probability of commercial banks.

The last conclusion once the test was completed was given as far as the invalid theory. We either "dismiss H_0 for H_a " or "don't dismiss H_0 "; we never finish up "reject H_a ", or even "acknowledge H_a ". If we close "don't dismiss H_0 ", this does not really imply that the invalid theory is valid, it just

recommends that there is not adequate confirmation against H_0 for H_a ; dismissing the invalid speculation then, proposes that the option theory might be valid.

Theories was expressed as far as populace parameter, for example, the mean μ . An option theory was uneven or two-sided. An uneven theory guarantees that a parameter is either bigger or littler than the esteem given by the invalid speculation. A two-sided theory asserts that a parameter is essentially not equivalent to the esteem given by the invalid speculation. Certainty interim gave an expected scope of qualities which was probably going to incorporate an obscure populace parameter, the assessed range being figured from these secondary data Ngechu (2004).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

Part examines empirical data on study of relationship between insider loans and bankruptcy probability in Kenyan Banking sector. This chapter begins by outlining the data on these variables in a table. Thereafter by doing a regression analysis of other variables such as rate of return on Asset as the independent variable to a bimodal of two independent variable insider loans denoted by x_1 and bankruptcy probability denoted as x_2 .

4.2 Response Rate

The response rate was at 100% as the sample member includes the entire bank industry licensed with the central bank. The Central bank regulation provides that all the banks to publish their financial statement hence availability of the data.

Variables/ Name of Bank	y-2013	x1 - 2013	x2 - 2013	y- 2014	x1- 2014	x2 - 2014	y-2015	x1- 2015	x2- 2015
Citibank	40.01%	5.49%	0.58%	32.32%	6.40%	2.38%	56.11%	5.43%	5.43%
Equity Bank	27.75%	3.23%	3.67%	32.81%	3.52%	3.87%	33.75%	3.37%	3.04%
Standard Chartered Bank	56.05%	3.28%	2.97%	40.03%	4.25%	7.24%	24.76%	3.83%	7.53%
Barclays Bank of Kenya	27.30%	7.77%	3.02%	30.77%	7.36%	3.33%	30.83%	9.15%	3.51%
NIC Bank	35.62%	2.82%	5.41%	36.87%	2.34%	4.01%	37.17%	3.07%	11.54%
Kenya Commercial Bank	40.16%	14.12%	4.56%	43.11%	1.75%	5.19%	44.96%	1.41%	4.84%
National Bank of	21.07%	11.96%	10.54%	69.33%	7.56%	11.02%	67.42%	7.37%	17.35%

Kenya									
Diamond Trust Bank	41.68%	3.56%	1.40%	46.96%	3.59%	1.27%	44.97%	3.22%	2.91%
Co-operative Bank of Kenya	32.59%	4.72%	4.45%	26.61%	3.77%	4.40%	27.00%	3.90%	5.07%
CFC Stanbic Bank	44.40%	6.02%	2.97%	45.24%	5.04%	3.81%	28.95%	3.39%	3.39%
I&M Bank	36.85%	4.52%	2.82%	39.73%	2.75%	1.32%	59.68%	2.93%	2.23%
Bank of India	49.87%	4.19%	11.94%	34.10%	3.60%	9.96%	43.32%	7.79%	7.14%
Bank of Baroda	27.43%	2.82%	3.91%	20.08%	2.61%	3.67%	20.96%	2.66%	5.79%
Family Bank	19.61%	6.36%	8.29%	22.47%	5.81%	7.17%	52.11%	3.11%	11.01%
Prime Bank	55.53%	4.09%	1.91%	58.24%	4.65%	1.90%	57.47%	4.97%	2.41%
Commercial Bank of Africa	43.43%	9.43%	3.47%	30.52%	6.68%	3.78%	30.30%	6.75%	3.88%
Bank of Africa	32.13%	2.35%	4.32%	8.64%	2.60%	6.27%	68.83%	1.95%	25.33%
Consolidated Bank	67.34%	1.69%	3.72%	72.47%	7.33%	26.34%	64.29%	7.12%	19.79%
Chase Bank	58.24%	4.65%	6.61%	41.68%	4.80%	5.72%	38.37%	3.28%	10.39%
Fina Bank	29.76%	3.41%	1.91%	32.89%	2.70%	1.90%	16.88%	2.73%	2.07%
EcoBank	2.54%	4.30%	9.44%	3.73%	4.59%	10.71%	3.08%	3.00%	8.25%
Habib Bank (K) Ltd	57.31%	6.13%	12.97%	52.19%	6.46%	2.20%	50.77%	8.86%	6.38%
Oriental Commercial Bank	73.07%	6.84%	7.74%	68.79%	5.79%	6.77%	60.77%	4.46%	11.73%
ABC Bank	46.47%	13.91%	9.22%	42.60%	0.40%	9.91%	38.39%	1.02%	13.99%
Middle East Bank	34.54%	8.40%	11.66%	34.37%	7.99%	12.36%	28.61%	8.57%	8.28%
Trans-National Bank	47.47%	2.02%	15.19%	44.12%	2.99%	30.08%	35.79%	3.94%	33.32%
Dubai Bank	63.93%	22.84%	11.60%	61.56%	24.46%	7.44%	59.58%	1.66%	3.34%

City Finance Bank	35.75%	2.92%	8.19%	33.03%	2.88%	6.17%	32.18%	3.05%	14.78%
Giro Commercial Bank	31.72%	10.63%	5.30%	33.06%	12.54%	2.74%	41.48%	8.19%	3.43%
Imperial Bank	47.72%	3.50%	5.42%	44.67%	4.18%	3.21%	55.05%	9.25%	1.94%
Guardian Bank	58.72%	6.77%	5.30%	63.46%	6.25%	5.96%	67.94%	6.21%	5.74%
Southern Credit Bank	47.01%	3.95%	2.42%	47.73%	3.72%	1.26%	46.80%	3.03%	6.10%
First Community Bank	63.67%	4.72%	8.40%	54.92%	3.65%	6.50%	82.04%	4.07%	8.42%
HFCK	28.32%	2.31%	9.22%	24.48%	2.70%	9.20%	37.11%	2.73%	9.70%
Victoria Commercial Bank	56.07%	4.63%	10.48%	48.54%	2.35%	6.24%	44.31%	0.82%	11.81%
Credit Bank	57.31%	6.13%	14.92%	52.19%	6.46%	9.77%	50.77%	8.86%	6.38%
Habib Bank (K) Ltd	22.84%	0.74%	4.74%	69.10%	0.82%	6.12%	67.82%	0.98%	6.98%
K-Rep Bank	73.07%	6.84%	7.74%	68.79%	5.79%	6.77%	60.77%	4.46%	11.73%
Development Bank of Kenya	34.54%	8.40%	11.66%	34.37%	7.99%	12.36%	28.61%	8.57%	44.96%
Equatorial Commercial Bank	47.47%	2.02%	15.19%	44.12%	2.99%	30.08%	35.79%	3.94%	33.32%
Fidelity Commercial Bank	35.75%	2.92%	8.19%	33.03%	2.88%	6.17%	32.18%	3.05%	14.78%
Paramount Universal Bank	31.72%	10.63%	5.30%	33.06%	12.54%	2.74%	41.48%	8.19%	3.43%
Gulf African Bank	83.04%	4.72%	8.40%	81.03%	3.65%	6.50%	82.04%	4.07%	8.42%

Figure 1: Empirical data of independent variables (Extract of Published audited financial statements 2013 to 2015)

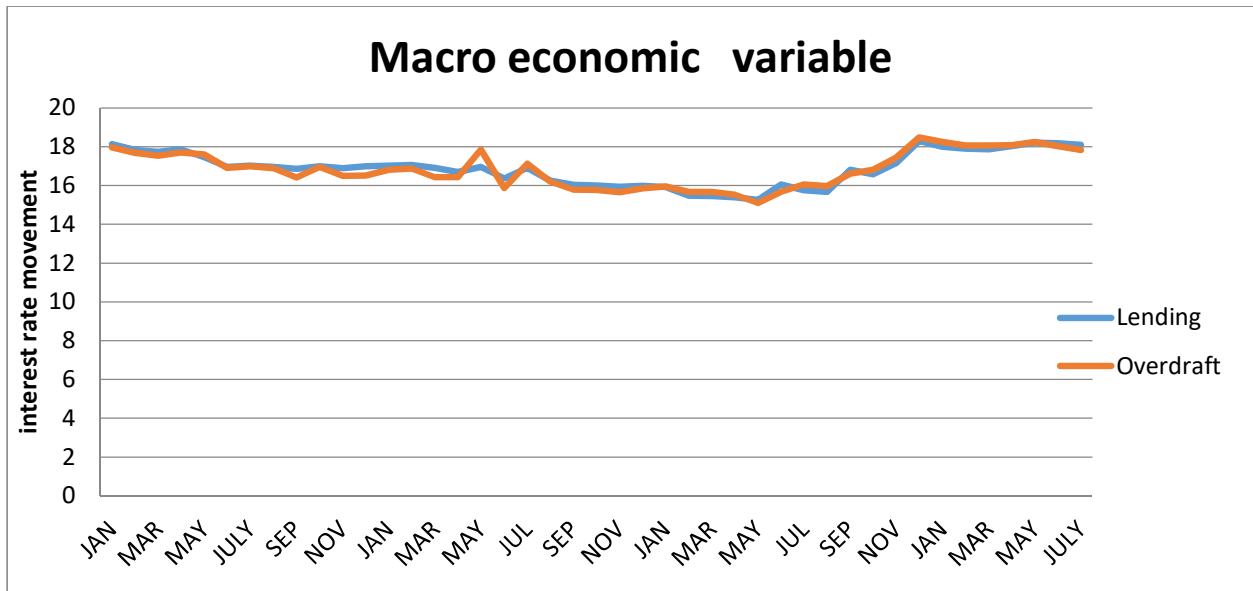
4.3 Descriptive Statistics

The general trend of the entire interest rate is shown in the graph below. The insider loan variable will be rate of inside loans over total loan of a given financial institution while the bankruptcy probability will be expressed as non-performing loan over total loan of a bank. The mean rates, standard deviations and skewness are show below,

	<i>x1 -</i>	<i>x2 -</i>		<i>x1-</i>	<i>x2 -</i>		<i>x1-</i>	<i>x2-</i>	
	<i>y-2013</i>	<i>2013</i>	<i>2013</i>	<i>y- 2014</i>	<i>2014</i>	<i>2014</i>	<i>y-2015</i>	<i>2015</i>	<i>2015</i>
Mean	0.4342	0.0588	0.0691	0.4274	0.0519	0.0734	0.4492	0.0461	0.1004
Median	0.4168	0.0465	0.0542	0.4168	0.0418	0.0617	0.4332	0.0390	0.0714
Mode	0.5731	0.0613	0.0191	0.5219	0.0646	0.0190	0.5077	0.0886	0.0638
Standard									
Deviation	0.1648	0.0415	0.0398	0.1690	0.0397	0.0668	0.1732	0.0254	0.0920
Sample									
Variance	0.0272	0.0017	0.0016	0.0286	0.0016	0.0045	0.0300	0.0006	0.0085
			-					-	
Kurtosis	0.0661	5.7578	0.6801	0.0234	12.9158	6.0623	-0.1665	0.9532	5.1346
Skewness	0.1939	2.0524	0.4931	0.1890	3.0426	2.4148	0.1354	0.5443	2.1792
Confidence									
Level(95.0%)	0.0507	0.0128	0.0122	0.0520	0.0122	0.0206	0.0533	0.0078	0.0283

Figure 2: description statisticFY-2013 to FY-2015)

Generally the data exhibit a normal distribution with the mean, mode and median being centered for FY 2013, 2014 but as the insider loans and non performing loans changes the distribution changes and becomes more skewed.



Interest rate is the core link between macroeconomic variable used to price the loanable funds. As the interest rate increase the non-performing loans increases, on the other hand, it has no effect on the insider loans as the interest rate for insider loan is constant and determined by internal bank policy. The probability of bankruptcy will increase as the interest rate increase as more defaulters increase.

4.4 Correlation Analysis

From the correlation analysis result the independent variables insider loans and non performing loan have weak correlation hence fitting a line of best fit will be most preferred. This also shows the low multicollinerity. This will not violate the assumption of ordinary least square method

	<i>x1 - pooled</i>	<i>x2- pooled</i>
<i>x1 - pooled</i>	1	
<i>x2- pooled</i>	0.005341551	1

	x1 -2013	x2 -2013
x1 -2013	1	
x2 -2013	0.169541998	1

	x1- 2014	x2 -2014
x1- 2014	1	
x2 -2014	-0.02392	1

	x1-2015	x2-2015
x1-2015	1	
x2-2015	0.01008914	1

4.5 Regression Analysis and Hypotheses Testing

Finally, we will examine the fitness of the model and carry out a test for parameters of the model to check whether they meet our core objective of the study as hypothesized.

Summary output 2013

<i>Regression Statistics</i>	
Multiple R	0.1683
R Square	0.0283
Adjusted R Square	-0.0203
Standard Error	0.1665
Observations	43

ANOVA

	<i>Significance</i>				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	2	0.0323362	0.016168	0.5831755	0.5627978
Residual	40	1.1089688	0.027724		
Total	42	1.1413050			

	<i>Standard</i>			
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.37755	0.0591146	6.3866816	1.352
x1 -2013	0.25836	0.6289280	0.4107941	6.834
x2 -2013	0.59940	0.6553025	0.9146924	3.658

Table 1: Regression Statistics and ANOVA results 2013

Summary output FY 2014

<i>Regression Statistics</i>	
Multiple R	0.21332
R Square	0.04551
Adjusted R Square	-0.00222
Standard Error	0.16916
Observations	43

ANOVA

				<i>Significance</i>	
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	2	0.0546	0.0273	0.9535	0.3940
Residual	40	1.1446	0.0286		
Total	42	1.1992			

	<i>Standard</i>			
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.36517	0.05198	7.02505	0.00000
x1- 2014	0.66916	0.65822	1.01662	0.31544
x2 -2014	0.37444	0.39059	0.95866	0.34349

Table 3: Regression Statistics and ANOVA results 2014

Summary output FY 2015

<i>Regression Statistics</i>	
Multiple R	0.046839
R Square	0.002194
Adjusted R Square	-0.047696
Standard Error	0.177245
Observations	43

ANOVA

				<i>Significance</i>	
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	2	0.0027630	0.0013815	0.0439751	0.9570239
Residual	40	1.2566322	0.0314158		
Total	42	1.2593953			

	<i>Standard</i>				
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	0.4418090	0.0637102	6.9346668	0.0000000	0.3130459
x1-2015	0.2668514	1.0760988	0.2479804	0.8054182	-1.9080254
x2-2015	-0.0491225	0.2974479	-0.1651467	0.8696604	-0.6502872

Table 3: Regression Statistics and ANOVA results 2015

Pooled Regression Analysis and ANOVA Results

<i>Regression Statistics</i>	
Multiple R	0.116951
R Square	0.013678
Adjusted R Square	-0.001978
Standard Error	0.168118
Observations	129

ANOVA

	<i>Significance</i>				
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	2	0.049384	0.024692	0.873635	0.419944
Residual	126	3.561200	0.028263		
Total	128	3.610584			

	<i>Standard</i>			
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.4008139	0.031066	12.901996	0.000000
x1 - pooled	0.4261880	0.409172	1.041588	0.299597
x2- pooled	0.1706581	0.211136	0.808283	0.420451

Table 4: Pooled Regression Statistics and ANOVA results

4.6 Discussion of Research Findings

It is from the data above that regression analysis was done. The first regression analysis captured the empirical data on the all the variables using different financial years to get individual inferential results on the study. The panel data excluded some banks since financial statement missed to capture all required data hence posing a challenge to regression data with unbalanced panel.

From the FY 2013 regression statistics, $R^2 = 0.0283$. This implies that insider loans and the probability of bankruptcy account for 2.83% of the changes likely to change dependent variables the rate of return on assets Ceteris Paribus. Adjusting R square for the degrees of freedom, we get the adjusted R square which is equal to -0.0203. This means that, these variables account for 5.4% of all the likely bankruptcy in the banking sector when adjusted for degrees of freedom. From the

ANOVA (Analysis of Variance), $F(F_{calculated}) = 0.58$ F is smaller than the significance F= 0.56. This implies that the model is insignificant.

From the ANOVA (Analysis of Variance) from regression of FY 2014 and regression of 2015, $F(F_{calculated}) = 0.04397$ F and is greater than the significance F= 0.957. This implies that the model is significant. Insider loan and non-performing loan portfolio plays a key role forecasting the bankruptcy probability of a bank. The fourth regression analysis will capture all the variables mentioned but we will pool all the data as one series get a pooled regression analysis. We will determine the impact of variable over time in study by carrying out chow test.

From the pooled regression statistics, the adjusted R squared = 0.0136, this implies that insider loans and non-performing loan rate explain 1.36% of all the possibility of a bank running bankruptcy holding all other factors constant. This is in comparison to the adjusted R squared from table 1, table 2 and table 3 above. This shows that insider lending does affect the rate of return on assets very minutely. $F(\text{Calculated}) = 0.8736$ is greater than the significance $F(\text{Calculated}) = 0.419944$ and this implies that the model is actually significant to explain the study.

VARIABLES	Parameter	Coefficients	P-value
Intercept	B_0	0.4000	0.000
INVESTMENTS % CHANGE	B_1	0.4260	0.2995
POPULATION GROWTH RATE (%)	B_6	0.1706	0.4204

Table 5: Regression results of variables (Significant at 5%)

The specific model was:

$$ROA = B_0 + B_1x1 + B_2x2 + U_i$$

From the regression results, the model now becomes;

$$ROA = 0.400 + 0.426x_1 + 0.1706x_2$$

B₀=0.400 -This is rate of return on assets when all other factors are zero. This implies that the ROA will still grow when all the variables in this model are zero. This can be explained by the fact that very crucial variables such as transactional income which have a big impact the profitability of the bank have been left out of this model due to lack of sufficient data.

B₁= 0.426 .This is the coefficient of insider loans. This means that the ROA increases by 0.426 when loanable funds are devoted to related parties increases by a unit. This variable is significant as its t -value is less than 2.

B₂=-0.1706. This is the coefficient of nonperforming loan. This means that when the rate of nonperforming loans increases by a unit, the ROA falls by 0.43502 units. This is in line with the priori expectation from agency theoretical review. This variable is very significant as reflected in its t-value which is less than 2.

CHAPTER FIVE

SUMMARY OF FINDINGS AND CONCLUSION

5.1 Introduction

Study derived data from all 43 commercial banks in Kenya focusing on published financials between 2013 and 2015 fiscal years. For data analyses, a homogenous definition of return on assets, insider loans and non-performing loans was required in order to determine the most suitable regression model for the relationship. The insider loan variable is determined to be rate of inside loans over total loan of a given financial institution while the bankruptcy probability will be expressed as non-performing loan over total loan of a bank.

5.2 Summary of Findings

Research objective was analyzing effect of related party loans on bankruptcy probability of commercial banks in Kenya and to determine whether related party loans have a significant impact on bank bankruptcy. Together, insider and non-performing loans are grouped as related party loans. The International Standards of Accounting define a related party as a situation where a company and another belong to the same group in a scenario where a parent and subsidiary entities are related to each other. The money related information is investigated to test the prescient capacity of the factors, relapse examination assessed and the essentialness of the general model and individual factors inspected.

The study also focused on the effect of the intervening variable, interest rates, on the bankruptcy probability.

Empirical analysis shows that all predictive correlation between related party loans and bankruptcy probability of research time span. Research findings indicate three important ratios: rate of assets

return, insider credits and non-performing credits. Assets return is a key profitability indicator more so for banks indicating profitability as ratio of bank's aggregate resources.. Insider and non-performing loans are critical indicators of bank bankruptcy. Insider fraud and other internal banking challenges in the past have led to failures of 61% of banks (Federal Deposit Insurance Corporation, USA, 2014).

5.3 Conclusion

The return on assets (ROA) was found to be positively correlated to insider loans and non-performing credits. The ROA grows when insider and non-performing credits are zero. This can be explained by the fact that very crucial factors such as transactional income have a bigger impact on profitability/bankruptcy of a bank.

Insider loans are seen to have positive correlation with the return on assets and thus bankruptcy probability. The return on assets is seen to increase when loanable funds increase. It is seen from statistical analysis that it is very significant as the t – value is less than 2. This means that as insider loans increase then is the likelihood of bankruptcy for the bank.

Non-performing loans has a positive correlation to bank bankruptcy probability. When the rate of non-performing loans increase, the return on assets falls thus increasing the likelihood of bankruptcy. This is consistent with the priori expectation from the agency theoretical review. Non-performing loans is also very significant as reflected in its t-value which is less than 2.

Interest rate is the core link between macroeconomic variable used to price the loanable funds. As the interest rate increase the non-performing loans increase. On the other hand, it has no effect on the insider loans as the interest rate for insider loan is constant and determined by internal bank policy. The probability of bankruptcy will increase as the interest rate increase as more defaulters increase. Amendments to the Kenya Banking Act in 2016, requires lenders to peg credit at 400

basis points above the benchmark central bank rate. This also includes interest on amounts borrowed before the legislation came into effect in August 2016. The net effect of this legislation is that interest payable in servicing a loan will greatly reduce. This is likely to leverage burden on borrowers to benefit their loans when they fall due hence greatly reduce banks' non-performing loan balances *ceteris paribus*.

5.4 Recommendations

The findings above indicate that bankruptcy probability in banks is significantly influenced by insider and non-performing loans. Commercial banks that are keen on increasing profitability and reducing bankruptcy likelihood should focus more on the levels of insider and non-performing loans that they carry in their books. Banks require to enact tougher policies and regulations around insider loaning as the applicable rates are purely at the precursor of the bank.

The lack of national regulation on interest charged on non-performing credits means that various commercial banks loan out to directors, directors close associates and relatives and to staff at rates determined internally. Any regulations imposed on the current norm, be it through an Act of Parliament or internally by the bank is likely to impact the current model of the project. Additionally, commercial banks have internal regulations on non-performing loans. Even though the Kenya Central Bank requires that the commercial banks report on non-performing loans, there has been no robust regulation at national level to cushion commercial banks against absurd changes in non-performing loans portfolio. Should such a regulation be implemented at National level, it could render the model less significant.

The model offers a platform within which relevance can be made to predict bankruptcy probability of commercial banks. Though the model focused on Kenyan banks alone, the Banking Acts and

regulations are similar across the African region. As such, the model can be applicable throughout the African banking sector.

5.5 Suggestions for Further Research

Future developments can be made on the project to consider the effect of other determinants mentioned above. In particular, the effects of national legislations on lending rates, improved bank supervisions and any future laws to regulate non-performing and insider loans should be considered in revamping the model.

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APPENDICES

Appendix I: List of Commercial Banks in Kenya

Classification	Description	Commercial Banks
Tier I	Comprises of banks with a balance sheet of more than Kenya Shillings 40 billion	<ol style="list-style-type: none"> 1. Citibank 2. Equity Bank 3. Standard Chartered Bank 4. Barclays Bank of Kenya 5. NIC Bank 6. Kenya Commercial Bank 7. National Bank of Kenya 8. Diamond Trust Bank 9. Co-operative Bank of Kenya 10. CFC Stanbic Bank
Tier II	Comprises of banks with a balance sheet of less than Kenya Shillings 40 billion but more than Kenya Shillings 10 billion	<ol style="list-style-type: none"> 11. I&M Bank 12. Bank of India 13. Bank of Baroda 14. Family Bank 15. Prime Bank 16. Commercial Bank of Africa 17. Bank of Africa 18. Consolidated Bank 19. Chase Bank 20. Fina Bank

		21. Ecobank 22. HFCK
Tier III	Comprises of banks with a balance sheet of less than Kenya Shillings 10 billion	23. Habib A.G. Zurich 24. Victoria Commercial Bank 25. Credit Bank 26. Habib Bank (K) Ltd 27. Oriental Commercial Bank 28. K-Rep Bank 29. ABC Bank 30. Development Bank of Kenya 31. Middle East Bank 32. Equatorial Commercial Bank 33. Trans-National Bank 34. Dubai Bank 35. Fidelity Commercial Bank 36. City Finance Bank 37. Paramount Universal Bank 38. Giro Commercial Bank 39. Imperial Bank 40. Guardian Bank 41. Southern Credit Bank 42. Gulf African Bank 43. First Community Bank