CONTRIBUTION OF FINANCIAL DISTRESS INDICATORS TO CORPORATE FAILURE AMONG COMMERCIAL BANKS IN KENYA

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Declaration

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Approval

This research project has been submitted for examination with my approval as the university supervisor.

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Dr. Aquilars Kalio

Egerton University.

Acknowledgement

Dedication

To my loving family; my daughters Gianna, Linda and Serena and my wife Janette.

Abstract

This study examines the contribution of financial distress indicators to corporate failure for commercial banks in Kenya. Specifically, the study examined the contribution of cash flows, liquidity, solvency, profitability and efficiency, utilization of shareholdersø funds and non performing loans to corporate failure. Other researchersø work was reviewed critically. Quantitative research design was employed and the probit regression model estimated to enable the researcher predict the probability that corporate failure occurs given that any of the financial distress indicators occurs. Data collection was through retrieval from secondary sources and covered a population of all 47 banks that were in operation and the ones that collapsed during the study period. The data was then analyzed using panel data probit regression method. Findings from the study indicate that a reduction in Profitability and efficiency (P and E) and Cash flow will lead to probability of corporate failure while an increase in Non Performing Loans (NPL) and Solvency will lead to probability of corporate failure.

Key Words: Corporate failure, Financial distress indicators, Commercial Banks, Panel data Probit regression method.

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LIST OF ACRONYMS

AML - ANTI MONEY LAUNDERING.

ARA - ASSET RECORVERY AGENCY.

CBK - CENTRAL BANK OF KENYA.

CRB - CREDIT REFFERENCE BUREAU.

DPF - DEPOSIT PROTECTION FUND.

FRC - FINANCIAL REPORT CENTRE.

IMF - INTERNATIONAL MONETARY FUND.

KBA - KENYA BANKERSøASSOCIATION.

KCB - KENYA COMMERCIAL BANK.

KCC - KENYA CORPORATIVE CREAMERIES.

KENATCO - KENYA NATIONAL TAXI COMPANY.

KNH - KENYATTA NATIONAL HOSPITAL.

NBFI - NON-BANK FINANCIAL INSTITUTIONS.

NBK - NATIONAL BANK OF KENYA.

NPL - NON PERFORMING LOANS.

NSSF - NATIONAL SOCIAL SECURITY FUND.

P and E - PROFITABILITY AND EFFICIENCY.

PCF - PROBABILITY OF CORPORATE FAILURE.

PTA - PREFERENTIAL TRADE AREA.

PWC - PRICE WATERHOUSE COOPERS.

USF - UTILIZATION OF SHAREHOLDERSøFUNDS.

USML - UCHUMI SUPERMARKET LIMITED.

WB - WORLD BANK.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Financial distress is the condition in which a business cannot meet its debt obligations. The chance of financial distress increases when a firm has high fixed costs, illiquid[1] assets, or revenues that are sensitive to economic downturns. Corporate failure is defined as a situation when a company owes more than it earns over significant periods of time and can no longer trade as a result of this (Dilley, 2008).

From the early 1990s, many countries had experienced financial distress of varying degrees of severity, some even suffering repeated bouts of distress. During this period, 1992ó2006, several countries in developed, developing and transition economies experienced severe banking crises requiring a major overhaul of their banking systems (Boyd, 2003). In Nigeria, for example, Nwankwo (1990) explains that financial distress and moral hazards affected most banks in the economy as a result of unprofessionalism in management and decision making processes. According to the author, retired military officers with no academic qualifications in either banking or general management were made directors of many of the banks that latter collapsed yet they didnøt understand the financial implications of running the banks profitably and professionally. Altman (2000) argues that developed economies including the United States of America (USA) also experienced banking crisis. The author further reveals that in the mid 90s, Citibank group alone had written off more than 39 billion dollars in losses, as bad debts.

Kariuki and Wanjiri (1994) explain that Kenya had experienced banking problems since 1986 culminating in major bank failures. The authors further argue that commercial banks in Kenya not only provide benefit to the domestic economy but they also present risks. Many of these banks suffered financial distress and corporate failures as a result of NPL and other moral hazards involving the banksø management especially on credit administration and political interference in management. In Kenya, business entities in both the public and private sectors had succumbed to financial distress according to Aiyabei (2002) who further lists some of the firms as Uchumi Supermarket Limited (USML), Kenya Cooperative Creameries (KCC) and

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[1] Illiquid assets are assets that cannot be easily disposed off for ready cash (Mishkin, 1999).

Kenya National Taxi Company (KENATCO). The banks that collapsed[2] within this period were: Charterhouse Bank, Trade Bank, Euro Bank, Preferential Trade Area (PTA) Bank, Pan African Bank, Trust Bank, Reliance Bank, Prudential Bank, Bullion Bank, Bank of Tokyo, Continental Bank of Kenya, Exchange Bank and Delphis Bank.

Several other authors amongst them, Kalani and Waweru (2007), Otieno (2008), Zeituni, Tina and Keen (2007) and Kariuki and Wanjiri (1994) have written articles in journals and books on the collapse of banks in Kenya during the 1980s through to 2006 when the last bank collapsed. The authors are all in agreement that at the outset of financial distress, directors engage in activities that favor creditors in an attempt to persuade them to ease pressure on the firm and consequently help the firm to solve its financial crisis. Nonperforming loans also played a big role in the collapse of these banks according to the authors. Prediction and analysis of corporate financial performance is therefore crucial.

The government through Central Bank of Kenya (CBK) has come up with several policies to try and streamline the industry so as to avoid further bank collapses (Kinyua, 2006). Prior to economy-wide reforms in early 1993, the author writes that policies evolved under a highly regulated economic and financial set-up with uncoordinated approaches, strategies, and instruments. He further argues that it was therefore difficult to find any thread of a coherent policy that attempted to control events. Significant changes in the institutional framework, operating procedures and instruments have taken place since 1993, culminating in a more elaborate conduct of policies. This was supposed to contain inflation and establish a viable external payment position in Kenya. The author puts explains that considerations for further refinement in operating procedures in the face of changing financial and economic environment were at the moment in progress.

Other policies that government has put in place so far include the Deposit Protection Fund (DPF) enacted in 1985 and which was revamped in 1993 by separating its operations from the bank, broadening its mandate and giving it more powers to take an active role in resolving the problems (Kalani and Waweru, 2007). The government further expanded the safety net by establishing the DPF as a deposit insurance scheme to provide cover for depositors and act as a liquidator of banks which could not be salvaged. In 1993, the Government adopted a

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[2] See table 2 Appendix I; list of all banks in operation from 1990-2006.

comprehensive economic reform programme initially under an IMF monitored arrangement that does involve provision of financial support and then later supported by an IMF Enhanced Structural Adjustment Facility (Kinyua, 2006). The author further states that in 2009 the government established the Credit Reference Bureaus (CRB) that was meant to help financial institutions share information on credit. The same year, according to Think Business (2011), parliament also passed into law the Anti-money-laundering (AML) Bill. Before this, there was no law in Kenya criminalizing AML. The book reports that even with all these policies in place, banks have continued to succumb to financial distress.

1.2. Statement of the Problem

The prediction of corporate failure can be measured by financial distress indicators like diminishing or negative cash flows, poor utilization of shareholdersø funds, illiquidity, insolvency, low profitability and efficiency trends and nonperforming loans. The uncertainty generated as a result of such distress, if left unchecked, often has a negative economic impact (Abdullahi, 2000). In the mid 1980s, Kenyaøs banking problems had culminated into major bank failures. A consolidation scheme crafted by government saw the birth of the Consolidated Bank of Kenya Limited whose aim was to take over the assets and liabilities of seven smaller banks that were financially distressed (Kalani and Waweru, 2007). The collapse of two banks in 1993 forced the government to revamp the Deposit Protection Fund (DPF). The DPF, though a good idea, was overwhelmed by the global financial crisis of the mid 1990s that saw two more banks collapse between 1996 and 1997. This pushed the government to form a task force to report on how to shield the banking sector from such adverse effects in future. The task force was not well equipped to deal with these bank failures causing the collapse of three more banks in 1998. According to Sundararajan and Balino (2010), the government was induced to take further action by passing the Anti-Money-Laundering (AML) Bill and licensing the Credit Reference Bureaus (CRB) in 2009 following further collapse of five more banks between 2001 to 2006. This study therefore aimed at identifying the financial distress indicators that led to bank failures and provides appropriate advice that would try to circumvent the collapse of banks in future.

1.3.Objectives of the Study

1.3.1 Overall Objective

The main objective of this study was to analyze the contribution of financial distress to corporate failure for commercial banks in Kenya. This was done by looking at the trends in the financial distress factors by use of the probit regression model.

1.3.2 Specific Objectives

i. To determine the relationship between cash flow and corporate failure.

ii. To establish the role of liquidity in corporate failure.

iii. To establish the role of long term solvency in corporate failure.

iv. To establish the role of profitability and efficiency in corporate failure.

v. To find out the relationship between utilization of shareholders funds and corporate failure.

vi. To establish the role of nonperforming loans in corporate failure.

1.3.3 Hypotheses

i. There is a negative relationship between cash flow and corporate failure.

ii. There is a negative relationship between liquidity and corporate failure.

iii. There is a positive relationship between long term solvency and corporate failure.

iv. There is a negative relationship between profitability and efficiency in corporate failure.

v. There is a positive relationship between utilization of shareholdersø funds and corporate failure.

vi. There is a positive relationship between nonperforming loans and corporate failure.

1.4 Significance of the Study

This research was of important significance for educational purposes and for further action plan by the government and more so the commercial banks. The research addressed pertinent issues that affect the proper operational process of management in commercial banks locally. From this research, further development or awareness should be created on the sensitization of the important role that early detection of the financial distress indicators will play in saving

investors, directors, customers and even staff from finding themselves in awkward positions as a result of an abrupt collapse of the commercial banks.

Creditors stand to benefit from the research findings as their major concern in a bank is the liquidity status. The study provides creditors with guidelines of determining the liquidity strength of the banks they deal with. The study adds knowledge towards improving the detection and prevention of corporate failure. Government will also be in a better placed position in the supervision and monitoring of commercial banks. Finally the study is of significant importance in expanding existing literature about corporate failure.

1.5 Scope of the Study

This study establishes the existence of financial distress indicators in local commercial banks in Kenya. During the period 1990 to 2006, the country witnessed the largest bank closures in pre-independence history where an average of more than a bank per year collapsed due to financial distress. This study further examined the various indicators of corporate failure in the local banking sector in comparison with the growth movements of the businesses after the banks started engaging in the operational acts that were seen as moral hazard that pushed the banks towards corporate failure. The research focused on all the 47 banks in operation at the time of study and all that collapsed during the same time, 1999 to 2006.

1.6 Limitations of the Study

The greatest impediment that the researcher encountered was getting the financial statements of two of the banks that collapsed and that the researcher intended to study. These two banks; Euro Bank and Chatter house Bank still had cases pending in the local courts and were still under scrutiny by foreign economic partners like the United States of America (USA) administration and the International Monetary Fund (IMF) and World Bank. To overcome this impediment, the researcher made it clear to the director of records at the CBK that the information was strictly to be used for educational purposes.

Before 1999, it was not a mandatory requirement by CBK to all banks and deposit taking financial institutions to publicly publish their financial statements in the press every financial quarter. Banks that released their financial statements to the public only did so out of their own volition. It was therefore difficult to secure such financial statements from the banks that never

published the statements at this time. In light of this event, the researcher adjusted his study period from the period of 1996-2006 which covered 66 banks to the period 1999-2006 which covered 47 banks to accommodate only the time when all the financial statements were available.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter gives background information in the bank failures around the world, in Africa and in Kenya. The researcher highlights the growth of local commercial banks in Kenya from independence through to the time the country started experiencing the international financial crunch in the mid 1980s. Government policies that were put in place to mitigate the situation of bank collapse were looked at. The literature review further highlights other theories that have been brought up in the past by scholars concerning the topic under study. In summary, the researcher brings forth the gap that still remains despite the previous researches that have been carried out by the said authors. The conceptual framework brings out the relationship between the variables that are highlighted in the chapter.

2.2 Background Information

The mid 1970s saw the emergence of banks owned by the local private sector in Kenya. Financial markets in Kenya had been dominated by foreign and government owned commercial banks in the period since independence. However, deficiencies in the intermediation provided an opportunity for local private investors to enter financial markets. Between the late 1970s and the mid 1980s, four banks and 25 Non-Financial Banking Institutions (NBFIs) were set up in Kenya. The expansion of local banks and NBFIs was temporarily retarded in Kenya by a series of bank failures in the mid 1980s but rapid growth resumed in the late 1980s (Nwankwo, 1990).

According to Kinyua (2006), few of the locally[3] owned private banks had grown strongly to gain a significant share of the domestic banking market. The author further states that some of the larger publicly owned domestic banks like Kenya Commercial Bank (KCB) and National Bank of Kenya (NBK) have also established subsidiaries[4] in other neighboring countries mainly

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[3] These are the banks that are privately owned with shares only to the private investors and not to the public or government. Some of them in Kenya are privately owned family business ventures.

[4] A subsidiary is an enterprise controlled by another (called the parent company) through the ownership of greater than 50% of its voting stock. (Harvey, Jenkins, 1994)

Southern Sudan, Uganda, Tanzania, Burundi and Rwanda. Further, most of the locally owned private banks like Credit Bank, Fina Bank and Transnational Bank are small both in capital and asset base with only a few branches locally in Kenya. These banks have however been prone to financial distress due to insider lending and many other moral hazards affecting their operations.

Table 1 provides data on the number of locally owned private banks in operation at various dates between 1980 and 1994 in Kenya and the estimated market share of the sector in the mid 1990s. By the mid 1990s, local banks had captured a quarter of the commercial bank market in Kenya.

Table 1: Locally Owned Private Banks, NBFIs and their Market Share (1980-1994).

Year under Review	Number of locally owned Private Banks.	Estimated Market Share	Number of NBFIs	Estimated Market Share
1980	0		8	
1985	4		24	
1991	7		32	
1994	17	25%	35	50%

Source: Kenya; Kariuki and Wanjiri, (1994).

Nwankwo (1990) states that the most important signals about financial distress can be received from the analysis of financial ratios of the firm. The author further argues that accounting based indicators of financial distress are still very popular among researchers and widely used as selection criteria. Despite the critique that financial ratios are past oriented and cannot capture the future dynamics and prospects of the company as a going concern, according to the author, they perform well in models predicting financial distress and probability of default.

Eakins (2008) adds that financial distress can be identified when a company experiences losses (negative pre-tax operating income or net income) over at least three consecutive years. Results of the author's empirical analysis on the dividend policy in financial distress shows that after a company enters into financial distress, it usually experiences cash flow problems and is unable to pay dividends. Therefore, rapid and aggressive dividend reductions together with consecutive negative income can be used in order to determine financial distress situation.

2.3 Evidence of Bank Failures in Kenya.

In early 1990s, the powers of Central Bank of Kenya (CBK) were greatly reduced with the liberalization of the financial sector (Kalani and Waweru, 2007). The authors argue that commercial banks were therefore; for example, free to set their own interest and exchange rates. According to the authors, of the 29 banks that were operating in Kenya at that time, several collapsed during the banking crisis in the early 1990s. Nyagito (2009), while researching on the impact of global financial crisis on the Kenyan banking system, noted that donors were deeply worried about the so called "political" banks in Kenya and hence held back much of their grants. Leading up to Kenya's general elections in late 1992, however, the regulatory environment relaxed considerably, as shaky borrowing, primarily from politically connected banks, soared to finance the campaigns of the then governing party (Ngugi and Kabubo, 1998). With the influx of money, inflation shot up to over 50 percent, and by late 1993 Kenya was in the midst of another financial crisis. According to the authors, the government responded by issuing large quantities of Treasury bills. While this tight monetary policy did ease inflationary pressures, it resulted in extremely high interest rates on treasury bills. The authors further report that the high interest rates discouraged private investment and restrained consumer spending, which limited the expansion of the economy. The reputation of the banking sector had suffered from a series of scandals.

The biggest financial scandal in Kenyan history broke in 1993 when CBK closed down Exchange bank (Kalani and Waweru, 2007). Exchange bank had been accused of failing to honor foreign exchange contracts and of securing privileges to the scrapped export compensation scheme. According to the authors, another bank, Reliance bank, bust on the 6th of September 1998 and was put under statutory management when it failed to pay 160 million Kenyan shillings in overnight borrowing from other banks. Its financial problems had been compounded by its heavy reliance on bearer certificates of deposits which accounted for 47% of its total deposits. The authors reveal that the bank had deposits amounting to 1.8 billion Kenya shillings and advances amounting to 1.2 billion Kenya shillings as at 31st August 1998 with assets totaling over 1 billion Kenya shillings locally and overseas. The authors further say that the bank had also failed to pay large sums to its creditors and four of its directors and four businessmen were later charged with theft of 304 million Kenya shillings.

According to Gorter and Bloem (2002) the decrease of NPLs during the period 1999-2001 was mainly attributed to the collapse of Trust bank and the write-offs made by some banks so as to clean their balance sheets. Trouble for Trust bank was triggered by a suit filed by a company

called Central Kenya Ltd which, according to the authors, wanted the high court to put the bank under receivership and order it to deposit security sufficient to cover its claim against the bank. The petitioner also wanted the bank to enhance its capital base by injecting 375 million Kenya shillings raising it to 1 billion Kenya shillings and also to set up recovery of NPLs. The authors further state that Central Kenya Limited feared that the bank would collapse and the company would lose its property. This application, according to the authors, created massive panic withdrawals that crippled the bank. CBK moved in to save it from total collapse by appointing a new manager charged with the task of rationalizing its operations. In 1998 CBK closed Trust Bank, sending the largest shock waves across the industry.

While CBK was grappling with this case, reports emerged that Bullion bank was also having liquidity problems and could not honor cheques worth 600million shillings, Kalani and Waweru (2007). According to the authors, the bank was ejected from the clearing house and also put under statutory management in November 2000. Another bank, Daima bank, according to Muller (2003) was also placed under statutory management in 2000 for failing to meet the minimum core capitalization threshold and poor management of loan portfolios. An International Monetary Fund Report (2005) stated that these collapses occurred despite the best efforts of CBK to reassure the country that all was well. Because of the level of interbank lending at that time, the collapse of one major bank could easily have had a domino effect on the other players in the industry.

In another published article seeking to quantify the extent and forms of donor proliferation and coordination in Kenya, Karingi and Siriwardana (2001) wrote about the collapse of four banks: Trust, Delphis, Post bank and Pan African. Of the four banks, the most notable bank collapse was of Delphis bank in 2003. The authors indicate that on CBK orders, Price Waterhouse Coopers examined documents at Delphis bank which showed that on the 2nd of April 1993 Delphis bank had inappropriately transferred 152 million Kenyan shillings to the Exchange bank. This was one of the other banks under audit. Three days later, 215 million Kenya shillings were transferred back to Delphis bank from Exchange bank. According to Otieno (2008), the four banks under audit were believed to have collectively channeled an inflow of 24 billion Kenyan shillings into the Kenyan economy the previous year which derailed inflation and credit targets and caused a dramatic fall in the shilling. This followed a series of bank closures by CBK in 2001 affecting Pan African Bank, Trade Bank and Preferential Trade Areas (PTA) Bank.

Perhaps the most interesting bank closure was the following year, 2002, when Euro bank was shut (Kalani and Waweru, 2007). Kenya Bankers Association had all along been issuing warnings and calling for regulatory action yet at the same time, Euro bank had controversially transferred 256 million Kenya shillings belonging to the National Social Security Fund (NSSF). No action, as it turned out, was forthcoming from Kenya's banking regulator, CBK. Euro bank closed its doors before CBK took any action and went under with 1.7 billion Kenya shillings of depositors' money. Otieno (2008) explains that uneasy questions started emerging over the role of CBK in endangering depositors' money by failing to take timely action. According to Otieno (2008), questions emerged on the circumstances under which Kenyatta National Hospital (KNH) deposited 421 million Kenya shillings of public funds in such an undercapitalized privately owned bank. The author further reveals that Euro bank was also indebted to Postal Corporation of Kenya to the tune of 50 million Kenya shillings and NSSF was yet to be paid 256 million Kenya shillings. It was difficult to understand how huge corporations like KNH, NSSF and NHIF could in total, hand over amounts in excess of 1 billion Kenya shillings to Euro bank knowing very well about its poor state of finances. Otieno (2008) raises much concern revolving around Euro bank's lending practices and deposit acquisitions that point to a =behind the scenes' political helping hand in its growth. The author sites the situation as reminiscent of the country's wave of bank failures in the 1980s and 1990s that saw many small banks established as conduits for siphoning money from state corporations. While there was no conclusive evidence to prove that, the author points out that the bank enjoyed a high degree of political patronage which influenced CBK's inaction towards its deteriorating finances.

Kinyua (2006) reports that in 2006, a leaked report from government investigation was tabled before parliament implicating Charterhouse bank and Nakumatt holdings in serious financial malpractices involving tax evasion and money laundering. The publicly declared shareholders and directors of the bank were not significant, though; however, intelligence in the financial industry indicated that the declared shareholders and directors could have been nominees for politically influential individuals who were thought to be the real owners of the bank (Njuguna, 2011). The author further reveals that the evidence available to the parliamentary committee on finance indicated that Nakumatt Holdings owned 25% of the issued shares in Charterhouse bank. According to the author, the Charterhouse crisis started way back in 1999 when a deposit of 2 billion Kenya shillings was paid into an account of a customer of the bank. The bank reported the

large deposit to the CBK in compliance with the existing thresh-hold reporting requirement rule. This immediately triggered an investigation for money laundering as CBK considered that the money was the proceeds of a crime. The author further reports that CBK obtained a court order freezing the account to pave way for investigations. Considerable inability was, however, displayed by CBK in the investigations. Impatient about the slow progress of investigations, the court lifted the freezing order on the account. As soon as this was done, the money was moved out of the bank stalling investigations. An earlier report tabled in parliament had claimed that a full examination of the affairs of the bank was impossible, according to Njuguna (2011). According to the report, the bank had refused to corporate in the investigations and had placed hurdles in the way. In 2006, according to the authors, the minister for finance placed Charterhouse bank under statutory management explaining that he had been forced to do so to protect the interest of depositors as a result of the disclosure of the report in parliament.

2.4 Government Policies Mitigating Financial Distress.

Following the collapse of several banks, the government, in 1993, adopted a comprehensive economic reform programme initially under an IMF monitored arrangement (Kinyua, 2006). This involved provision of financial support to financially distressed banks and was later supported by an IMF Enhanced Structural Adjustment Facility. The author reports that this was however hindered by the withdrawal of funding by the IMF citing the unwillingness of government to fight graft within the banking sector by allowing the mushrooming of ¬politicalø banks thereby compromising on the professionalism and the prudential guidance rules.

Kalani and Waweru, (2007), explain that the Deposit Protection Fund (DPF) was enacted in 1985 and latter was revamped in 1993 by separating its operations from the bank. This, according to the authors, broadened the DPFøs mandate giving it more powers to take an active role in resolving the problems. The government further expanded the safety net by establishing the DPF as a deposit insurance scheme to provide cover for depositors and act as a liquidator of banks which could not be salvaged. This, according to the authors failed due to the global financial crisis of the mid 1990s opening way for more banks to collapse.

The Anti-Money-Laundering (AML) Bill was signed in December 2009 and came into effect in June 28th 2010. By introducing the AML, the government aimed at enabling the identification, tracing, freezing as well as seizure and confiscation of proceeds of crime. The law seeks to

establish a Financial Reporting Centre (FRC) and Assets Recovery Agency (ARA). This was to criminalize money laundering and further require reporting institutions to take measures to help combat money laundering. The same year, the Credit Reference Bureau (CRB) Bill was enacted into law. The CRB were aimed at allowing the banks and other financial institutions to be able to share credit information especially concerning un-credit worthy persons like defaulters from other institutions.

2.5 Theoretical Literature Review: The Indicators of Financial Distress

Several financial distress indicators led to these banksø failure but for the purpose of this study the researcher focused on only six; Cash flows, Liquidity[5] trends, Long term solvency[6], profitability and efficiency trends, Nonperforming loans and finally utilization of shareholdersø funds. According to Lynch (2007), the six distress indicators mentioned above provide the most accurate ratios of measuring the possibilities of corporate failure in a financial institution.

Cash flow analysis studies the cycle of a firm's cash inflows and outflows, with the purpose of maintaining an adequate cash flow and providing the basis for cash flow management. This cycle determines a firmøs solvency. It involves examining the components of a firm that affect cash flow such as; accounts receivable, inventory, accounts payable, and credit terms. By performing a cash flow analysis on these separate components, it is possible to easily identify cash flow problems and find ways to improve the firmøs cash flow (Eakins, 2008). A quick way to perform a cash flow analysis is to compare total cash inflows to total cash outflows at the end of each year. If total cash outflows are greater than total cash inflows, the bank will need to spend more cash than it received in the next year, indicating a potential cash flow problem. Doing cash flow analysis of the accounts receivable reveals the slow payers. The cash flow information contains significant incremental information over accrual accounting information to discriminate between bankrupt and non bankrupt banks. The higher the ratio, the better (Madura, 2005).

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[5] Liquidity is an assetøs ability to be sold without causing a significant movement in the price and with minimum loss of value. This is also the ability of an enterprise to meet its short term debts.(Brigham, Ehrhardt 2005)

[6] Solvency is the degree to which the current assets exceed the current liabilities of an individual or entity. It is the ability of an entity to meet its long term fixed expenses and to accomplish long-term expansion and growth. (Brigham, Ehrhardt 2005)

The current ratio is very useful in measuring the liquidity position of a bank. It measures the bank's capacity to pay off current obligations immediately and is a very rigorous test of liquidity (Barr, 2004). According to Lynch (2007), the ratio is calculated by dividing the Quick assets (treasury bonds and bills, cash at hand, cash held with CBK and with other banks) by the Total liabilities (deposits from customers and borrowed funds). Usually, a high ratio is an indication that the bank is liquid and has the ability to meet its current or liquid liabilities in time. On the other hand, a low ratio indicates that the bank's liquidity position is not good. As a convention, CBK has set the minimum ratio at 20%, below which a bank must have reason to worry.

The long-term solvency of a firm determines its going concern status thus a firm whose long-term solvency is in doubt cannot survive in the long run (Beninga, 2006). Total current liabilities/Total current assets ratio indicates the proportionate claims of owners and the outsiders against the firmøs assets. The purpose is to get an idea of the cushion available to outsiders on the liquidation of the firm. The ratio gives an indication of what portion of the bankøs liabilities is covered by its assets. A low ratio implies that the bank has a long solvency threshold. The ratio should never be more than 100% because that would imply the bankøs liabilities exceed its assets, rendering it insolvent. A ratio of 1:2 is usually considered to be a satisfactory ratio, CBK Prudential Guidelines (2010). Theoretically if the owneres interests are greater than that of creditors, the financial position is highly solvent (Ross, Westerfield and Jordan, 2007).

Ross et al. (2007) shows that the profit margin is the overall gauge of a firmøs efficiency with which it turns each shilling in sales into net profit. For this reason, the authors argue that the ratio will try to ascertain the relationship that exists between a firmøs total operating income and total operating expense. According to the authors, this is a very good measure of the managementøs efficiency in managing operating costs. With narrowing net interest margins non-interest income has become more important to banks in recent years. By taking the total operating income which includes the bankøs overheads and weighing it against the total operating expense, the resulting ratio is known as the income/cost ratio, which is also a measure of efficiency. If this ratio is high, it will indicate the bankøs ability to control its overall costs and the bankøs efficient management of sales activities. It will also show the bankøs ability to generate profits out of resources committed to it. On the other hand, if low it will indicate the decline in sales due to external factors and show increased cost of production over sometime due to factors beyond the firmøs control. It will also show a decline in prices due to government controls or other external factors.

Turetksy and McEwen (2001) explain the shareholder's funds as the residual profits that a firm will maintain for their immediate consumption or retained for the future expansion of the business. The authors show evidence that prior to collapse, many banks reduce the distribution of dividends and may even record negative earnings. The authors show that for a joint stock company, a dividend is allocated as a fixed amount per share; therefore, a shareholder receives a dividend in proportion to their shareholding.

By dividing the shareholders' funds by the total assets of the bank, you arrive at a ratio that measures how well shareholders' funds have been utilized. If the funds move up proportionally with total assets (or vice versa) the ratio stays the same. But if the shareholders' funds are growing more than the total assets then the ratio will go up which is desirable (Sharma and Iselin, 2006).

A non-performing loan is a loan that is not earning income and the full payment of principal and interest is no longer anticipated (Zeituni, Tian and Keen, 2007). According to the authors' NPL is realized when principal or interest is 90 days or more delinquent[7], or the maturity date has passed and payment in full has not been made. The immediate consequence of large amount of NPLs in the banking system is bank failure. Many researches on the cause of bank failures find that asset quality is a statistically significant predictor of insolvency (Barr and Siems 2004), and that failing banking institutions always have high level of non-performing loans prior to failure. Net loans at the level of 215 billion Kenya shillings as at December 31st, 2001 accounted for 51% of total net assets of the Kenyan's banking sector. At this time, the proportion of the NPLs to total loans was 30% (Zeituni, Tian and Keen, 2007).

Brigham and Ehrhardt (2005) argue that the NPLs are one of the major causes of corporate failure. Each NPL in the financial sector is viewed as an obverse mirror image of an ailing unprofitable firm. From this point of view, the eradication of non-performing loans is a necessary condition to improve the economic status. If the NPLs are kept existing and continuously rolled over, the resources are locked up in unprofitable sectors; thus, hindering the economic growth and impairing the economic efficiency. The researcher therefore focused on the impacts of NPLs specifically at the bank level to empirically evaluate how they contribute to corporate failure.

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[7] Delinquencies are an indicator or credit quality at any point in time. Loan balances are considered delinquent when contractual payment of the loan become 30 days past due.

Figure 1: Trend of NPL in Kenya over the period 1995-2003.
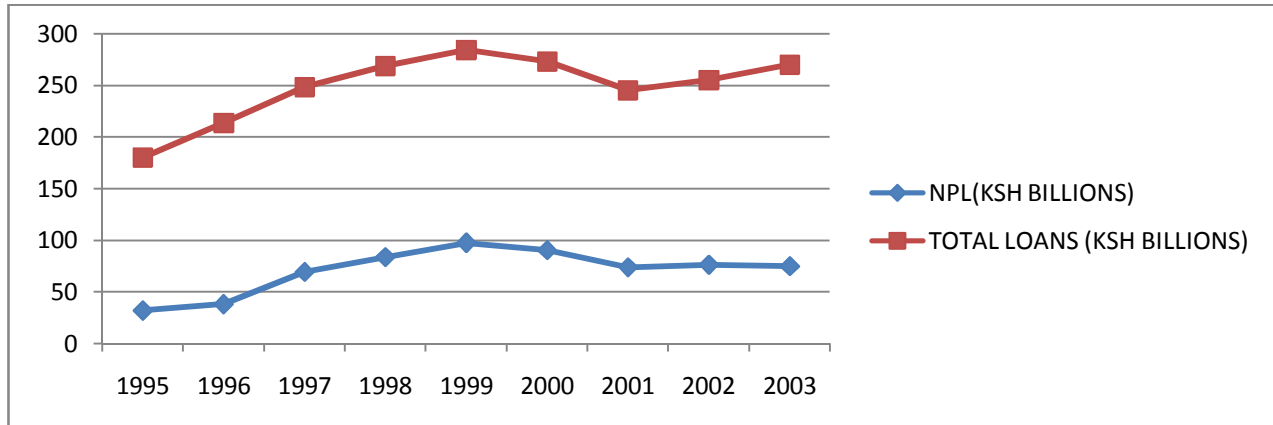
Analysts use the NPL ratio to compare lenders. The ratio is calculated as the total NPLs divided by the total loan and advances to customers and multiply the result by 100 to get the ratio. If a lender has a high NPL ratio, the lender will have difficulties with cash flows. This is because the loans that the bank holds have a high probability of not being paid back. If a lender therefore does not receive a return of his principal on the loan, he will lose money and so the higher the NPL ratio the more likely this will happen (Turetksy and McEwen, 2001). A high ratio of NPL to advances therefore is a reflection of imprudent lending practice and poor credit management. It poses a threat to customersødeposits. A low ratio is therefore desirable.

2.6. Empirical Literature Review

The study on corporate failure has followed several avenues over time. Early work carried out by Abdullahi (2000) focused on the distress affecting the Nigerian banking sector. His study was designed to examine the effects of mergers and acquisitions in the banking industry in Nigeria. The need to carry out the study arose from the challenges faced by Nigerian banks despite the reduction of banks from 89 banks to 25banks at the end of 31st December 2005. Those challenges faced by the Nigerian banks had made researchers to question the efficacy of the consolidation of banks in the country. Abdullahi used the explorative research method for the study. His findings revealed that the consolidation (mergers and acquisitions) activities in Nigeria did not meet the desired objective of liquidity, capital adequacy and corporate governance which had resulted to more troubled banks after the consolidation. On the basis of that, the study recommended among others that corruption, fraud, insider abuses and other moral

hazards must be minimized in the banking industry for the country to derive the benefits of mergers and acquisitions of banks.

Several researchers have addressed the problems that financial distress indicators contribute to corporate failure. Njuguna (2011) conducted a case study on financial indicators of corporate failure on Uchumi supermarket limited, a supermarket chain in Kenya that collapsed in 2005. He went further to examine the financial distress indicators and moral hazards that Uchumi management had faced a few years leading to its collapse. His research findings showed that the collapse was as a result of unprofessionalism in the management, high operating costs, negative net cash flow, negative net current assets and unfavorable currency movements among others. In his study, Njuguna used both primary data with questionnaires and secondary data with published financial statements of Uchumi supermarket. As a remedy, he pointed out that, the government should not have continued to influence key decisions without involving the shareholders even after the supermarket had been listed on the Nairobi Stock Exchange (NSE) making it a publicly owned company. Secondly, he noted that the grand strategy was ill timed in that too many branches were opened carelessly pushing up the operational costs. Lastly Njuguna noted that an aggressive turnaround strategy that would include closing unprofitable branches, retrenching some redundant workers and overhauling the purchasing system as important for proper results to have been realized.

Zeitun, Tian and Keen (2007) investigated the effect of cash flow and free cash flow on corporate failure in the emerging market in particular Jordan. They used two samples; matched sample and a cross-sectional time series (panel data) sample representative of 167 Jordanian companies in 1989-2003. Logit models were used to outline the relationships between firmøs financial health and probability of default. Their results showed that a firmøs free cash flow increases corporate failure and the firmøs cash flow decreased corporate failure. Firmsø capital structures were fundamental in predicting default. Capital structure was seen as the main factor affecting the probability of default as it affected a firmøs ability to access external sources of funds. Jordanian firms depended on short-term debt for both short and long term financing.

Whereas Zeitun et al. (2007) study touched on a cross section of all companies in different industries in Jordan, Kariuki and Wanjiri (1994)øs study focused strictly on local banks in Africa. The study investigated the causes of financial distress in local banks in Africa and implications

for prudent policy. The authors noted that the local banks provided benefits to the domestic economies but they also presented risks, with many having suffered financial distress and bank failure as a result of NPLs. They attributed the severity of bad debt problems to moral hazard on bank owners and the adverse selection of bank borrowers, with many banks pursuing imprudent lending strategies, in some cases involving insider lending. Low levels of capitalization, the political connections of bank owners, and access to public-sector deposits contributed to moral hazard. The authors recommended that regulatory policy should aim to strengthen prudential supervision of local banks, particularly of credit policies, to enforce banking regulations and improve the incentives on bank owners to pursue prudent management.

Unlike the corporate failure indicators mentioned in the four research studies above, Campbell, et al, (2010) examined the performance of distressed stocks in measuring corporate failure. The authors considered the measurement and pricing of distress risk. They presented a model of corporate failure in which accounting and market-based measures forecasted the likelihood of future financial distress. They then used their measure of financial distress to examine the performance of distressed stocks from 1981 to 2008. The authors found that distressed stocks had highly variable returns and high market betas[8] and that they tended to underperform safe stocks by more at times of high market volatility and risk aversion. However, investors in distressed stocks had not been rewarded for bearing these risks. Instead, distressed stocks had had very low returns, both relative to the market and after adjusting for their high risk. The underperformance of distressed stocks was present in all size and value quintiles[9]. It was lower for stocks with low analyst coverage and institutional holdings, which suggested that information or arbitrage-related frictions may have been partly responsible for the underperformance of distressed stocks.

The studies from these scholars didn't however sufficiently address the issue of local commercial banks in Kenya that collapsed due to financial distress due to a number of reasons. Abdullahi's study focused on Nigerian banks that operated in a different economic, social and political climate to the Kenyan case. This study therefore is relevant in the Kenyan case as far as local commercial banks are concerned. Njuguna's study, was based on a non-financial institution

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[8] Beta is a measure of volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole (Sharma et al. 2006).
[9] Quintiles are a statistical value of a data set that represents 20% of a given population (Sharma et al. 2000).

while Zeitun et aløs study only used one of the five financial distress indicators (cash flow) to make a judgment on corporate failure in the Jordanian companies. This isnøt sufficient enough as an average of all or most of the indicators would be better placed to give a clearer perspective. Campbell, et aløs dwelt on the trend of distressed stock to draw a decision on corporate failure. The study therefore would not be applicable to banks for that reason. My analysis was therefore based strictly on the Kenyan banks and focused on the key financial distress indicators of corporate failure. I also used the used the panel data probit regression method for analysis, a model not used by all the other mentioned researchers.

2.7 Conceptual Framework

INDEPENDENT VARIABLES.	**INTERVENING VARIABLES.**	**DEPENDENT VARIABLE.**
FINANCIAL DISTRESS INDICATORS: • Cash Flows. • Liquidity Trend. • Long Term Solvency. • Profitability and Efficiency Trends. • Utilization of Shareholdersø Funds. • Non Performing Loans.	• Insider Lending. • Macro-economic Instability. • Lending to High Risk Borrowers. • Political Interference. • Economic Recession.	**CORPORATE FAILURE:** • Probability of Corporate Failure.

Figure 2: Conceptual Framework.

Source: Researcherøs conceptualization (2011)

The dependable variables show corporate failure as a situation that can be measured by collapse of a bank. Placement under statutory management, sometimes Mergers and acquisitions could also be seen as a sign of corporate failure. This would be so especially when the directors of the bank that is being acquired or getting into a merger feel that they are better off selling out their shares or joining the other to be stronger and therefore avoid collapse. The Collapse, though, remains a definite measure. The independent variables are the cash flow trends, liquidity trends, long term solvency, profitability and efficiency trends and utilization of shareholdersø funds. The intervening variables create an enabling environment for corporate failure.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter addresses the research design for the study. Here, the population, the sample size and the design are discussed. The research procedures, the data collection and data analysis methods to be employed are also discussed.

3.2 Research Design.

Quantitative research design was employed. The study aimed at identifying the financial distress indicators that contribute to corporate failure. In order to achieve this, a probit regression model was estimated. According to Mugenda and Mugenda (2003), the probit regression model is the best to use when dealing with a time series data. Quantitative research was justified since the use of the regression equation required figures arrived at through calculations of ratios and the dummy figures from the measure of corporate failure.

3.3 Population

The population for this study was supposed to be 66 commercial banks[10] in Kenya that were in operation between 1990 to 2006 including those that suffered financial distress and were shut down during the same period. However, data from only 47 banks both in operation and those that suffered financial distress and were shut down between 1999 to 2006 was used. In running the analysis, the entire population was used since the dependent variable was a dummy variable.

3.4 Data Collection

Secondary data was collected from financial statements; balance sheet and profit and loss accounts of all the banks. This was obtained from the banking survey of Kenya available in bookshops and at the CBK library. The data obtained was considered reliable and valid, since all the financial statements had been audited by accredited audit firms and by the CBK auditors as per CBK requirements. Data covered the period from 1999 to 2006.

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[10] See Appendix I; list of all banks in operation from 1990-2006.

3.5 Data Analysis

Descriptive statistics such as means, standard deviations, kurtosis and skewness was computed. The regression model was analyzed using the panel data regression method. Stata was used as the analysis package. The probit regression model therefore enabled the researcher to estimate the probability that corporate failure occurred given that any of the financial distress indicators also occurred. The regression equation took the form:

$$P(Y/X_t) = \beta_0 + \beta_1 X_{t1} + \beta_2 X_{t2} + \beta_3 X_{t3} + \beta_4 X_{t4} + \beta_5 X_{t5} + \beta_6 X_{t6} + \varepsilon$$

Where: P = Probability.

Y/X_t = Corporate failure.

β_0 = Constant.

X_{t1} = Cash flow.

X_{t2} = Liquidity (current ratio).

X_{t3} = Long term solvency (debt/equity ratio).

X_{t4} = Profitability and efficiency (cost/income ratio).

X_{t5} = Utilization of shareholdersø fund.

X_{t6} = Nonperforming Loans.

ε = the error.

t = time (Since the data is time series).

The parameters β_0 to β_6 are coefficients that were estimated. Corporate failure was measured by use of a dummy. It took the value of 1 if the bank collapsed, merged or was acquired and 0 otherwise of all the banks in operation from 1999 to 2006. In order to avoid specification errors, logarithms of cash flows were used in estimating the model. The other ratios were calculated as:

Liquidity = (Current assets ÷ Total liabilities) × 100.

Long term solvency = (Total current liabilities ÷ Total current assets) × 100.

Profitability and efficiency = (Total operating income ÷ Total operating expense) × 100.

Utilization of shareholdersø funds = (Shareholdersø funds ÷ Total Assets) × 100.

NPL = (Total NPL ÷ Total Loans and Advances to customers) × 100.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter covers the general findings of the research, data analysis, interpretation and discussion of the results. The chapter presents findings on the role of; cash flow, liquidity, long-term solvency, profitability, utilization of shareholderø funds and non performing loans in contributing towards corporate failure.

4.2 Results and Discussion of Descriptive Tests

Table 2 presents summary statistics for the variables under study. They include; mean standard deviation, skewness and kurtosis of the different variables.

Table 2: Summary Statistics for Independent Variables.

Statistics	Variables					
	Solvency	USF	Liquidity	P and E	NPL	Cash flows
Mean	83.13	17.32	44.24	69.48	26.3	14.3
Median	85.6	14.44	40.01	64.5	18.3	14.2
Maximum	180.2	87.01	221.88	279.7	174.82	17.41
Skewness	0.21	0.45	1.76	2.25	2.25	0.33
Kurtosis	11.18	9.2	13.2	22.8	9.95	3.16
Std Dev	16.7	16	23.91	23.1	26.5	1.3
Minimum	13	-63	0.96	8.92	0.12	10.7
Observations	265	265	265	265	265	265

Source: Analysis results (2012). Initials *"P and E"* represent profitability and efficiency, õStd Devö represents standard deviation while õ*USF"* represents utilization of shareholdersøfunds.

Solvency, measured by the current ratio, has a mean of 83.13 with a standard deviation of 16.7. According to Think Business (2008), a high current ratio would not be desirable. The CBK stipulated current ratio is 1:2 (total current liabilities: total current assets) according to the book.

The ratio 1:2 means a 50% ratio that is acceptable meaning the higher the ratio, the more the liabilities are growing compared to assets. A high mean of 83.13 therefore signals a problem of possible insolvency. The utilization of share holdersø funds ratio has a mean of 17.32 with a standard deviation of 16. According to CBK Prudential guidelines (2008), this shows poor utilization of shareholdersø funds since a high ratio (shareholdersø funds: Total assets) of above 50% is desirable. The low mean implies that the shareholdersø funds were underutilized. A liquidity ratio mean of 44.24% is reported. The stipulated ration by CBK is 5:1 or 20% showing that the assets cover the liabilities well enough. The mean, therefore is acceptable according to Think Business (2011). The profitability and efficiency ratio has a mean at 69.48 with a standard deviation of 23.1. According to Think Business (2008), a higher ratio would be desirable. A low ratio would imply that the expenses are more which leads to losses.

The NPL ratio has a mean of 26.30 with a standard deviation of 26.5. A high ratio of NPL is a reflection of imprudent lending practice and poor credit management. The lower the ratio, therefore, the better. The cash flow mean is 14.28 with a standard deviation of 1.30 indicating a general dismal performance among the banks. By performing a cash flow analysis, the total cash inflows are compared to total cash outflows at the end of each year. From the ratio, it implies that total cash outflows were greater than total cash inflows. This in turn means that the banks needed to spend more cash than they receive in the next year, indicating a potential cash flow problem.

4.3 Regression Results.

Table 3 reports results of the probit fixed effects regression for the financial distress indicators and corporate failure among Kenyan Commercial Banks. The dependant variable is probability of corporate failure and the independent variables are Liquidity, Profitability, NPLs, Cash flow, solvency and shareholdersø funds.

A strong negative correlation (-0.98) emerges between solvency and utilization of shareholders funds indicating a possibility of multicollinearity between the two variables. The two variables are therefore first entered separately in different models. Column (1) reports results of the model which excludes solvency; column (2) reports results of the model which excludes utilization of shareholdersø funds; and column (3) reports results of the model containing all the variables.

From the results, the withdrawal of the solvency variable in column (1) does not affect utilization of shareholdersø funds since the utilization of shareholdersø funds remains insignificant in

column (3). Contrary, the withdrawal of the utilization of shareholdersø funds affects solvency in that the solvency variable becomes significant at 5% level.

Table 3 Regression results for factors that could lead to corporate failure.

Independent Variables	Dependent Variable (Probability of Corporate Failure)		
	1	2	3
Liquidity	-0.0073	-0.0056	-0.0027
	(-0.93)	(-0.71)	(-0.34)
P and E	-0.0155	-0.0163	-0.0161
	(-1.84)*	(-1.86)*	(-1.71)*
NPL	0.0352	0.0341	0.0293
	(4.93)***	(4.64)***	(3.98)***
Cash flow	-0.2898	-0.3212	-0.3381
	(-1.82)*	(-1.93)*	(-1.94)*
Solvency		0.0153	5.0572
		(1.66)*	-0.6
USF	-0.0126		5.0441
	(-1.42)		-0.6

The Z-stats are in parenthesis. Asterix * and *** indicate significance levels of 10% and 1% respectively. Initials *"P and E"* represent profitability and efficiency while *USF* represents utilization of shareholdersø funds.

Source: Analysis results (2012)

The results for column 3 show that an increase in NPL will significantly increase the probability of corporate failure whilst an increase in cash-flow and profitability and efficiency will significantly reduce the probability of corporate failure. Specifically, if NPL increases by 1, probability of corporate failure increases by 0.0293. On the other hand if profitability and efficiency increases by 1, probability of corporate failure falls by 0.0161 whilst an increase of cash-flow by 1 reduces probability of corporate failure by 0.3381. The other variables, USF and solvency insignificantly increase the probability of corporate failure whilst liquidity insignificantly reduces the probability of corporate failure.

More recently, researchers (Njuguna, 2011; Zeitun et al. 2007; Abdullahi, 2000; Kariuki and Wanjiri; 1994) in their studies on corporate failure found that profitability was a significant variable in predicting corporate failure. Abdullahi (2000) and Kariuki and Wanjiri (1994)øs both studied banks. Further in their study, Kariuki and Wanjiri (1994) presented findings showing that NPL is the single most important threat that a bank can face. Conversely, they brought out evidence confirming that a high ratio of NPL to advances is a reflection of imprudent lending practice and poor credit management. It poses a threat to customersø deposits. The authors therefore approved a low ratio as being desirable.

Njuguna (2011) further confirms the findings on the relationship between cash-flow and corporate failure in his studies on Uchumi super market. Indeed, a decrease in cash flow was recorded over the five years leading to the collapse of the giant supermarket chain store. Further, Zeitun et al. (2007), Kariuki and Wanjiri (1994) and Abdullahi (2000) also confirm these findings in their separate studies on corporate failure.

CHAPTER FIVE:

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

5.1 Introduction

This chapter summarizes the findings as well as the conclusions gathered from the analysis of the data. The findings have been summarized alongside the objectives of the study. Conclusions have been drawn from the study and the recommendations given.

5.2 Summary of Findings

The general objective of the study was to determine the contribution of financial distress indicators to corporate failure. The study found out that NPL, solvency, cash-flow and profitability and efficiency were significant in detecting corporate failure in banks.

5.3 Conclusion

The study identified that when NPL increases, the probability of corporate failure also increases. An increase in NPL implies that the total NPL was more than the total loans and advances given out by the banks. A high NPL means that there is lost opportunity in the money that has been given out and yet it is not generating any income to the bank. In the long run, this is always written off as bad or doubtful debts signalling losses to the banks. Corporate failure is therefore more likely to occur in this situation.

When profitability and efficiency increases, the probability of corporate failure reduces. An increase in profit margin means an increase in disposable income that the bank can use to invest further in its growth. Increased efficiency in the banks would cover proper management policies being practiced for the sake of the growth of the banks.

Furthermore, an increase in cash flow results in a reduction in the chances of corporate failure. Increased cash flow implies that, among other things, the banks are not struggling to pay debts as they become due since they have the funds. A high amount of advances as opposed to deposits is also a major cause of cash flow problems because in that case the banks are giving out more than they are receiving.

In closing, it is evident that increasing solvency leads to an increase in the chances of corporate failure. The ratio of a bankøs total current liabilities to total current assets provides an inkling of

its solvency. Increasing the ratio, therefore, implies that the bank has a long solvency threshold meaning that the bankøs liabilities exceed its assets. On the other hand, reducing the ratio gives an indication of a short solvency thresh-hold implying that the bankøs assets exceed its liabilities.

5.4 Recommendations

Profitability being the focus of every bank makes it imperative, therefore, that the higher the better. The focus of interest should be the productivity and efficient management of the bankøs capital resources since this directly contributes to profitability. Banks can also make their capital position strong and steady by giving low dividend payout. This allows earnings to be retained to boost the capital base. It also avails more resources to the bank for the purposes of enhancing the profits.

Loans are assets for banks, but banks always fail because of non-performing loans. Banks should therefore be expected to make provisions for the eventuality that the loans may not be repaid. These provisions should be specific to the individual loans. The banks should be able to measure and predict how far the provisions are covered by the bankøs operating income. The management of the banks should also make sure that the provisions do not suck up the entire operating income. Banks should also come out of their traditional lending activities and realize that income from non- lending sources has come to play a larger role over the years. An investment in new banking products and activities is also one of the largest sources of income for banks that has come from the most traditional of bank activities; lending and investment. Advances should never be more than deposits as this would mean that the bankøs liabilities surpass the assets signaling danger.

The government should take it as a duty to engage in the rescue of banks that are failing due to insolvency since the public is an interested stakeholder. Banks should also engage lawmakers, consultants and scholars in technical assistance work that would advise the legislators and officials involved in devising a legal framework for insolvency.

Banks should be aware of their ability to meet liabilities as they become due to avoid a cash flow crisis. By practicing proper cash flow management, the probability of an adverse cash flow situation developing can be reduced. Further, banks should also track the impact of prepayments of loans and premature closure of deposits. This way, cash outflows can be ranked by the date on

which liabilities fall due. A system should be evolved to monitor high-value deposits (other than interbank deposits), or more to track the volatile liabilities. Further, the cash flows arising out of contingent liabilities in normal situation and the scope for an increase in cash flows during periods of stress should also be estimated.

5.5 Areas for further research

Overall, some caveats are appropriate in catapulting the pursuance for further research. Many of these directions could contribute significantly to our understanding of corporate failure especially where fraud is suspected. The auditor should therefore play an important role within the corporate fraud environment. An extended study of other cases brought before the courts is a fruitful avenue for research because through court actions much of their behaviour is publicly revealed. Doing so could begin to reveal yet further similarities and differences, and also test the conceptual frameworks used to explain the presence of fraudulent corporate failure. An analysis of ethical practices and promulgations, accounting standards and auditing guidance, brings out a better understanding of how they benefit (or fail to benefit) practice, then it may also be possible to see how the auditor is either enabled or restrained by their regulatory environment. It would be worthwhile to explore further the auditor's own formal (and informal) role in detecting and reporting corporate failure in a timely manner. An economic perspective on the issue is also important. The auditor operates in a competitive market to provide 'assurance' services at less cost than its competitors. If it can be demonstrated that such incentives do or do not operate well, then much may be achieved in terms of identifying market interventions that should occur. Further study needs to be done relating to bank failure due to insolvency. This is because much attention needs to be paid relating to the regulatory framework of failing banks. Structural reforms in the banking sector, in particular the implementation of effective exit rules to expel insolvent banks from the market, should be considered as of primary importance to restoring confidence in the banking sector.

5.6 Limitations

The researcher had picked a population of sixty six banks but only data for forty eight banks was available. The rest of the data could not be availed due to two reasons; what the CBK described as õclassified informationö and change of the beginning of the study period from 1996 to 1999. By classified information, CBK officials explained that there were some banks that still had

cases in court and therefore exposing their financial statements to the public would interfere with the cases.

Secondly, most of the years within the time period of ten years that the researcher hoped to cover could not be covered since information from the earlier years was not available. The available information was from 1999 to 2006. This means that some of the 66 banks that the researcher hoped to cover were left out as they collapsed before 1999 forcing the researcher to cover a study period from 1999 to 2006 covering only 47 banks.

[11]Before 1999 it was not compulsory by law for commercial banks to publish their financial statements in the press for the public consumption. This also means that the researcher could not get the needed information for the earlier years.

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[11]CBK prudential guidelines 2010.

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List of Banks in the Sample

Appendix I shows the list of all the 66 banks in Kenya during the period of study (1990-2006). The collapsed banks during this period are also highlighted.

	Existing banks from 1990-2006	Status as at 2006	Exit	Reasons for exit
1	ABC Bank	Operational		
2	ABN Amro Bank	Not in operation	1999	Wound up operations
3	Akiba Bank	Not in operation	2005	Merged with EABS
4	Bank of Africa	Operational		
5	Bank of Baroda	Operational		
6	Bank of India	Operational		
7	Bank of Tokyo	Not in operation	1997	Collapsed
8	Barclays bank of Kenya	Operational		
9	Biashara Bank of Kenya	Not in operation	2003	Merged with I&M
10	Bullion Bank	Not in operation	2000	Collapsed
11	CFC Bank	Not in operation	2008	Merged with Stanbic
12	CFC Stanbic Bank	Operational		
13	Charterhouse Bank	Not in operation	2006	Collapsed
14	Chase Bank	Operational		
15	Citi bank	Operational		
16	City Finance	Not in operation	2010	Merged with Jamii Bora
17	Commercial Bank of Africa	Operational		
18	Consolidated Bank	Operational		
19	Continental Bank of Kenya	Not in operation	1996	Collapsed
20	Co-operative Bank of Kenya	Operational		
21	Credit Agricole Indosuez (K)	Not in operation	2004	Acquired by BOA
22	Credit Bank	Operational		
23	Daima Bank	Not in operation	2000	Collapsed
24	Delphis Bank	Not in operation	2003	Collapsed
25	Development Bank of Kenya	Operational		
26	Diamond Trust	Operational		
27	Dubai Bank	Operational		
28	EABS Bank	Not in operation	2008	Acquired by ECO Bank
29	ECO Bank	Operational		
30	Equatorial Commercial Bank	Not in operation	2010	Merged with SC

	Existing banks from 1990-2006	Status as at 2006	Exit	Reasons for exit
31	Equity Bank	Operational		
32	Euro Bank	Not in operation	2002	Collapsed
33	Exchange Bank	Not in operation	1993	Collapsed
34	Family Bank	Operational		
35	Fidelity Commercial Bank	Operational		
36	Fina Bank	Operational		
37	First American Bank of Kenya	Not in operation	2004	Acquired by CBA
38	Giro Commercial Bank	Operational		
39	Guardian Bank	Operational		
40	Habib A.G. Zurich	Operational		
41	Habib Bank Ltd	Operational		
42	HFCK	Operational		
43	Imperial Bank	Operational		
44	Investments and Mortgages (I&M)	Operational		
45	Kenya Commercial Bank	Operational		
46	Korea Exchange Bank	Not in operation	1993	Wound up operations
47	K-Rep Bank	Operational		
48	Mashreq Bank	Not in operation	2000	Acquired by DBK
49	Middle East Bank	Operational		
50	National Bank of Kenya	Operational		
51	NIC Bank	Operational		
52	Oriental Commercial Bank	Operational		
53	Pan African Bank	Not in operation	2001	Collapsed
54	Paramount Universal Bank	Operational		
55	Prime Bank Limited	Operational		
56	Prime Capital and Credit	Operational		Subsidiary of PML
57	Prudential Bank	Not in operation	1998	Collapsed
58	PTA Bank	Not in operation	2001	Collapsed
59	Reliance Bank	Not in operation	1998	Collapsed
60	Southern Credit Bank	Operational		
61	Stanbic Bank	Not in operation	2004	Merged with CFC
62	Standard Chartered Bank	Operational		
63	Trade Bank	Not in operation	2002	Collapsed
64	Trans-National Bank	Operational		
65	Trust Bank	Not in operation	1998	Collapsed
66	Victoria Commercial Bank	Operational		

Source: The Banking Survey (2011). Initials SC, DBK and PML represent Southern Credit, Dubai Bank Kenya and Prime Bank Limited respectively.

APPENDIX II

Financial Budget

Budget of money spent.

	ACTIVITY	COST PER ITEM	TOTAL COST
1	**Proposal Preparation**		
	Stationery (papers, pens, files,)	4,500.00	
	Typing, photocopy and printing	2,600.00	
	Flash disk	1,500.00	
	Computer time and internet	450.00	
	Travel expenses	2,500.00	
	Subsistence allowances[12]	1,000.00	
	Cell phone airtime	1,500.00	**14,050.00**
2	**Data collection:**		
	Research in libraries	3,500.00	
	Subsistence allowances	3,600.00	
	Overhead/incidental expenses	800.00	
	Travel expenses	5,000.00	
	Typing and printing	3,000.00	**15,900.00**
3	**Data Analysis:**		
	Coding and data entry into Stata	1,000.00	
	Typing and printing	3,000.00	
	Purchase of Banking Survey Books	15,000.00	**19,000.00**
4	**Research Reports:**		
	Draft typing and printing	3,000.00	
	Binding final copies for presentation	1,000.00	
	Power point slides	500.00	
	Per diem for researcher[13]	4,000.00	**8,500.00**
	TOTAL		**57,450.00**
	10% Contingency expenses		5,745.00
	GRAND TOTAL		**63,195.00**

Source: Researcher's conceptualization

[12] The costs for such things as lunches and accommodation. (Mugenda and Mugenda, 2003).

[13] The kind of compensation or salary for the work to be done. (Mugenda and Mugenda 2003).