BANKRUPTCY COSTS AND THEIR EFFECT ON THE VALUE OF THE FIRM: THE CASE OF THE BANKING INSTITUTIONS IN KENYA.

A RESEARCH PROJECT FOR THE DEGREE OF MASTER IN BUSINESS ADMINISTRATION IN THE FACULTY OF COMMERCE, UNIVERSITY OF NAIROBI.

BY:

MEROKA L.K D61/P/8915/99

SUPERVISOR:

MR. V.O KAMASARA

DECLARATION

This project is my original work and has not been submitted for a degree in any other University.

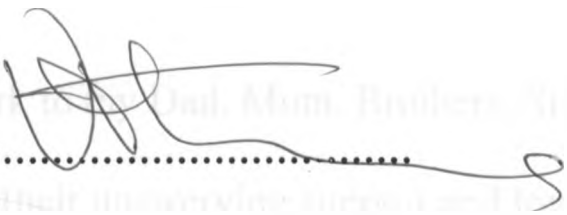
Name of the Student: Lucy Kerubo Meroka

Signature:  **.....**

Dated: 3rd November 2003

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

Name of Supervisor: V.O Kamasara

Signature:  **.....**

Date: 3rd November 2003

ACKNOWLEDGEMENTS

I am greatly indebted to my supervisor, Vincent Kamasara, for his constant encouragement, guidance, constructive criticisms, suggestions, comments and patience throughout the period of the research project.

Particular thanks go to Dr. Ayako of Central Bank of Kenya and his colleagues who helped by providing me with the reports they had to extract the data needed for this study. Stella and Kodo for their encouragement and suggestions on various aspects of the study.

Finally, I dedicate this work to my Dad, Mum, Brothers, Sister and my daughter Bijou for their unswerving support and love.

ABSTRACT

The banking industry plays a major role in the economic development as they provide the money to be invested, by matching the needs of depositors who have excess money in their hands and the borrowers who have less money at their disposal. There is need to understand the implications of banks being placed under statutory management.

The study's two objectives assessed the costs of bankruptcy as a percentage of the value of the banks. The study sought to determine the relationship that exists between the costs of bankruptcy and the value of the bank.

A sample of eight banks was drawn based on the data availed by the Central Bank of Kenya for banks that failed between 1998 and 2002. The data of the operational banks between 1996 and 2002 was used to develop the regression equation.

The findings were as follows:-

1. The costs of bankruptcy as a percentage of the value of the bank was significant for the period of the study. The total costs of bankruptcy as a percentage of the total assets of the bank was above a hundred percent in the year of failure. This implies that bankruptcy costs are significant in the decline of the value of the bank when it is placed under statutory management. There is need for stakeholders to determine the probability of financial distress and/ or bankruptcy when making financing and investment decisions to ensure the maximization of shareholders wealth.

2. The bankruptcy costs were noted to increase as the date of bankruptcy approached. The bankruptcy costs may be reduced if the Central Bank of Kenya takes prompt action to place all banks under statutory management when they begin to show signs that the bank may experience financial distress. The bank may then reorganize its operations and continue with the banking business.
3. The bankruptcy costs increased as failure approached for each of the three categories as defined according to size. The bankruptcy costs were higher for the larger banks as opposed to the smaller banks, as a percentage of the total assets. The mean of the large banks is significantly different from that of the medium banks and the small banks. This can be explained by the fact that the large banks have clientele who may have ready access to public as well as private information on the banks performance and they will act on the information promptly which makes the bankruptcy costs to be high. The clientele of the small banks are likely to be small depositors who may not have ready access to information on the banks performance and the large amounts of cash required to open an account will shut them out of the large banks. This type of depositors may react slowly to the information about the banks impending bankruptcy. The medium banks will have depositors who are a cross between those of the large and small banks.

On the basis of these findings, it is recommended that bankruptcy costs be considered when making decisions as relates to financing and investment decisions, especially if the bank is larger as the costs are higher.

TABLE OF CONTENTS

LIST OF TABLES

Page

CHAPTER ONE:

INTRODUCTION.

1.1 BACKGROUND

Financial distress is defined as the situation when a firm is unable to meet, or experiences difficulties in meeting, payments to creditors. Two distinct situations are apparent which influence the costs of financial distress. The first is the case where the value of the firm is greater than the present value of creditors' claims. Under such circumstances, financial distress is caused by a cash shortfall relative to the current creditor payments. The costs involved include such things as any higher than 'normal' borrowing costs to 'cash up' the shortfall, loss in value of any assets that are hurriedly sold to provide the needed cash, costs of managers' time directed away from more productive activities in order to overcome the temporary problem, and receiver costs if creditors will want the firm to recover from and trade out of its current difficulties. The second case is where the distress situation is associated with the value of the firm being less than the present value of creditor claims. This situation will lead to receivership and applications for recovery of claims through the courts. In addition to the costs of these activities, there are indirect costs associated with resolving conflicts of interest between debt holders and equity holders(Bishop, Crapp, Twite 1988).

In the United States of America, a 'problem bank' is one that in the eyes of the Federal banking agencies has violated a law or regulation or engaged in an unsafe or unsound banking practice to such an extent that the present or future solvency of the bank is in question (Bett 1992).

The Banking Act; Chapter 488; Part I section 2(1) defines **'Bank'** to mean a company which carries on or proposes to carry on banking business in Kenya and includes the Co-operative bank of Kenya limited, but does not include the Central Bank of Kenya.

Banking Business as per the Banking Act means:

a) The accepting from members of the public of money on deposit, repayable on demand or at the expiry of a fixed period or after notices.
b) The accepting from members of the public of money on current account and payment on and acceptance of cheques; and
c) The employing of money held on deposit or current account or any part of the money, by lending , investment or in any manner for the account and at the risk of the person so employing the money.

For the purposes of this study, a failed bank is one that has been declared a 'problem bank' by Central Bank of Kenya and has been placed under statutory management.

(VanHorne 2002) Bankruptcy costs are more than the legal and administrative expenses of bankruptcy; they involve inefficiencies in operating a company when it is about to go bankrupt, as well as the liquidation of assets at distress prices below their economic values. When insolvency and/ or liquidation costs are significant, investors may be better served if the firm pays attention to its total risk, not just its systematic risk. The probability of a firm being forced into liquidation depends on the total variability of its

cash flows. If there were no costs associated with liquidation, investors would concern themselves only with the systematic risk of a security. As long as the assets of the insolvent firm could be sold or traded at the economic values, no penalty would be involved. The fact that an individual firm might be forced into liquidation would be embraced in the overall systematic risk of the firm that investors were willing to tolerate in their portfolios.

With bankruptcy costs, however, there is a penalty to the investor who fails to factor in the probability of bankruptcy when evaluating an investment. The greater the cost of bankruptcy and the greater the probability of its occurrence, the more concerned the investor will be with the total risk of the firm. VanHorne (1976) suggests that administrative expenses in a business bankruptcy may approximate twenty percent of the value of the estate. By multiplying the probability of occurrence of bankruptcy times the asset value of the firm under distress conditions times twenty percent, one obtains a very crude picture of expected bankruptcy costs.

1.2 IMPACT OF FINANCIAL DISTRESS COSTS ON THE VALUE OF A FIRM

Altman (1984) finds large indirect costs of financial distress. Recent studies examine financially distressed firms and find indirect evidence that financial distress is costly (Asquith, Gertner, and Scharfstein (1994), Gilson (1997), Hotchkiss (1995), and LoPucki and Whitford (1993)). This therefore, implies that capital structure decisions are relevant when deciding how a firm will raise capital because such decisions affect the value of shareholders wealth.

White (1983) and Altman (1984) estimated the direct costs of financial distress to be less than 3 percent of the market value of the firm. In a study of direct financial distress costs of 20 railroad bankruptcies during 1930 – 1935, Warner (1977) found that net financial distress costs were on average, 1 percent of the market value of the firm seven years before bankruptcy and were somewhat larger percentages as bankruptcy approached. (For example, 2.5 percent of the market value of the firm three years before bankruptcy). The higher the probability of financial distress, the greater will be the erosion on the value of the firm. Altman's (1969) model of predicting failure of firms can be used to determine the probability of failure, hence adding credibility to the above studies that indicate costs of financial distress increase as bankruptcy approaches.

From the foregoing literature review, it can be seen that bankruptcy costs significantly impact on the value of the firm. In Kenya, few studies have been done to show the relationship between bankruptcy costs and the value of the firm and in particular as they relate to the banking industry.

The possibility of liquidation usually is not a linear function of the debt/equity ratio, but it increases at an increasing rate beyond some threshold. Consequently the expected costs of liquidation increase in this manner and would be expected to have a corresponding negative effect upon the value of firm and upon its cost of capital. While creditors bear the ex-post cost of liquidation, they probably pass on the ex-ante cost to shareholders in the form of higher interest rates and lower share prices for listed companies. Hence, the shareholders would bear the burden of ex-ante liquidation costs and lower valuation of

the firm, which follows. Liquidation costs represent a 'dead weight' loss, investors are unable to diversify away these costs even though the market equilibrium process is assumed to be efficient.

1.3 THE FAILED KENYAN BANKS, THE CAUSES AND THE SOLUTIONS.

The study focused on the years 1998 to 2002 because Central Bank of Kenya could only avail data for this period.

In Kenya the massive bank failures of 1988 was triggered by a sudden proliferation of non-bank financial institutions. The non-banking financial institutions were so popular that nearly every bank had one, which was a subsidiary. For example Stanbic Bank had Stanbic Finance Kenya Limited, Standard Chartered Bank had Standard Chartered Finance Services, Standard Chartered Investment Services and Standard Chartered Kenya Nominees Limited, Barclays Bank had Barclays Merchant Finance Limited, Kenya Commercial Bank had Kenya Commercial Finance Company. The non banking financial institutions got distressed mainly because their deposits were all short term while they lent to customers on long term basis (Mismatch between assets and liabilities).

In 1993, several financial institutions were placed under liquidation by the Deposit Protection Fund. The main objective of Deposit Protection Fund Board is to promote depositor's confidence in the banking sector. The Deposit Protection Funds annual report and financial statements for the year ended June 2002 indicates that there are banks that

were placed under statutory management in 1993 and that they are still being managed by the Deposit Protection Fund.

In 1993 alone the following institutions were placed under liquidation by the Deposit Protection Fund, Inter Africa Credit Finance, International Finance Limited, Central Finance, Postbank Credit, Diners Finance, Middle Africa Finance Corporation, Trade Bank, Trade Finance Company, Allied Credit, Nairobi Finance.

1998 was another conspicuous year for Kenya's financial system generally and the banking industry specifically. It was yet another year of banking crisis. In a record three months, five banks namely Trust bank, City finance bank, Prudential bank; Reliance bank and Bullion bank were all placed under the Central Bank of Kenya's statutory management during the year. In 2001, Delphis bank was placed under statutory management. In 2003 Daima Bank and Euro bank were placed under statutory management.

Save for Trust bank, the other banks are those commonly referred to as small banks by the Central Bank of Kenya, on the basis of their levels of assets and liabilities. Trust bank, then Kenya's 6th largest bank was brought to its knees due to panic withdrawals occasioned by allegations that the bank was insolvent. The eventuality of Trust bank's collapse due to a run on its deposits was the impetus for the difficulties experienced by City Finance bank and Reliance bank. Bullion and Prudential banks appear to have crumbled on their own merit because they were illiquid. National bank of Kenya, the 4th

largest bank in the country in terms of assets and branch network was surely destined for Central Bank of Kenya's statutory management in 1998, except for the government's intervention by injecting cash which assisted it from the fate of having a run on its deposits.

The banking crisis has been as a result of wrong bank management decisions as relates to investments. Mismatch between assets and liabilities, non-performing loans and due to the financial institutions being inter-related leading to a contagion effect when one financial institution experiences financial distress.

Most of the institutions that fail are the small banks as is identified by the Central Bank of Kenya. Mergers and acquisitions have been suggested but these only work if the cash streams of the two companies are not perfectly correlated, the acquisition will lower the probability of default by the acquiring company, and hence, the expected present value of that company's costs of forced liquidation. Synergy is usually created when mergers and acquisitions take place. This may be the reason why in 1998 the Governor of the Central Bank of Kenya urged the smaller banks to merge hoping that the synergistic effects may have stemmed the number of banks placed under statutory management. Southern Credit Bank is the only one that has so far merged with Bullion Bank in 2002 hopeful to take advantage of synergistic effects.

Bankrupt firms if operationally healthy should through reorganization be able to get back on their feet again. However, of all the banks placed under statutory management in

Kenya, Trust bank quickly went into liquidation and Bullion bank merged with Southern credit bank. United bank reopened as Chase bank and was ranked forty third in 2001 by Market Intelligence banking survey 2002. The other financial institutions that failed from 1993 are still under statutory management as per the financial statement of the Deposit Protection Fund as at 30th June 2002.

The Deposit Protection Fund as at 30th June 2002 had paid 74% of the protected depositors funds, the bulk of whom were the depositors of Trust Bank. In the same period the recovery of total outstanding loans was only 12.4%. Trust bank constituted the largest proportion of outstanding debt at 42.7% of outstanding loans. According to Deposit Protection Fund, debt recovery remained difficult due to a combination of factors including lack of securities, poor documentation, lengthy court process, inability to execute judgements and harsh economic conditions.

The above situation where payments to protected depositors are high yet recovery of outstanding loans is low may have lead to other stakeholders in the banking industry to feel sidelined, hence making it difficult for banks placed under statutory management to be revived.

1.4 STATEMENT OF THE PROBLEM

In Kenya the attitude that a licensed banking institution was viewed as a legitimate and sound investment channel was long held by the public until the first lot of institutions failed in the 1980's.

Altman (1969) carried out a survey in USA, Japan, Brazil, Australia and Canada. In all the five countries, he found marked differences between financial ratios of failed and non-failed groups of firms. Analysis of such data allows prediction of bank failures in advance. Studies in America by Sinkley (1975), Piefer (1970), Mayer (1970) have shown that most banks deterioration to problem status or collapse is not an overnight change but is a gradual development. Such findings are the basis of developing financial based predictors of potential failure candidates. Bett (1992) found that ratios had a significant contribution to the discriminant function in 1987 (two years prior to failure) and / or 1988(one year prior to failure). These models allow the financial analysts to estimate the probability of a firm's failure. Using the probability of failure, the analyst can obtain an estimate of bankruptcy costs, which can then be used to determine the value of the firm.

According to Market Intelligence (3rd quarter) Banking Survey 2002, no less than three banks were in an unsatisfactory condition. Central Bank inspection reports showed that eight banks have unsatisfactory or had marginal performance, although no action seemed evident on the side of the regulator. This brings to question whether the excuse of the contagion effect in the industry should continually be used in postponing the regulator's decisive action on banks that have unsatisfactory performance. It is doubtful whether the shareholders are privy to the information held by Central Bank of Kenya on the banks performance as per the inspection reports and whether the share prices reflect this pertinent information. If the regulator has failed; has the market mechanism of demand and supply failed? Does the information held by the regulator filter down to shareholders, investors and depositors?

ABN Amro finally withdrew its operations from the country in 2001, its portfolio was taken over by Citibank. The Central Bank of Kenya holds that the banking industry in Kenya could do well by consolidating into some 15 to 20 banking institutions compared to the current 46 (Market Intelligence, 3rd quarter Banking Survey 2002). Is this position being researched on and is it backed by substantial evidence so that the regulator can act on it?

Statutory management of troubled banking institutions may not be providing a ready solution to banks that are facing difficulties. Usually the depositor ends up the loser, this is because the depositors are compensated up to Ksh.100, 000 in full; any amount above that is not mandatory for payment as the government is keen only in protecting the small depositor. Whether the institutions put under statutory management could be revived largely remains debatable. The track record on re-opening of statutory managed banking institutions is dismal. Two key issues arise that is, does the regulator delay in taking action until the banks placed under statutory management are those that can not be revived? Is the approach used by the regulator outdated, given that their focus may be on specific aspects of the banks performance. The regulator needs to rethink how to best handle the problem banks so that the stakeholders losses are minimized.

As for now the Kenyan depositors, continue to treat the smaller local banks with apprehension because of their perceived insecurity given that of the forty financial institutions placed under statutory management since 1984 to date, thirty nine of them are

small local financial institutions. The more stable local small banks suffer from the contagion effect of this stereotyping. The beneficiaries are the well-established international banks, which are not interested, in the small depositor.

Studies by (Bett (1992) and Altman (1969)) done in both Kenya and in other countries indicate that prediction of corporate failure is possible. However the effect of bankruptcy on the firm, has not been adequately researched on to measure bankruptcy costs and its impact on the going concern value of the firms in Kenya; while in the countries where studies have been carried out the results have indicated that bankruptcy costs impact significantly on the value of the firm.

In view of the above, it is imperative to determine the relationship if any between bankruptcy costs and the value of the firm in Kenya.

1.5 OBJECTIVES OF THE STUDY

The main objective of the study was to find out whether the bankruptcy costs are significant as compared to the value of the failed commercial banks. This objective has been sub-divided into the following :-

1. Determining the level of bankruptcy costs as a percentage of the value of the bank.
2. Determining whether the relationship between bankruptcy costs and value of the bank varied when banks were classified according to size as set out by the Central Bank of Kenya.

The banks were classified into various categories as per size using the asset base, banks are classified into three, large, medium and small which formed the subsectors of the banking industry.

1.6 IMPORTANCE OF THE STUDY

This study will aid the following groups of persons when making decisions: -

a) Legislative or regulatory bodies

Whether statutory management of banks causes the bank to lose the going concern value, this will allow the regulatory body to evaluate its policy and procedure of turning around failed banks. The regulator needs to act at an appropriate time, while the institution can be revived. Review of the trend of ratio of bankruptcy costs to value of the firm over a two-year period; will aid in determining the ideal time for the regulator to act.

b) Investors

The study provides investors with yet another tool to allow them make decisions on where they shall invest their money. Investors want to place funds in investments that will increase their wealth. If an institution is headed for bankruptcy, the investors can use the results obtained by this study to determine the rate of return required to compensate them for the additional risk inherent in the investment.

c) Depositors

Results of this study provides depositors with information that may be useful especially when selecting the bank they want to keep their savings in. Depositors are compensated

up to Kshs.100,000 any deposits above this threshold will be paid if the bank has funds left over after paying all preferential creditors. For depositors with more than Kshs.100,000, they will be keen to ensure that the banks probability of bankruptcy is small before making their deposits.

d) Other organizations

The relationship found between costs of bankruptcy and the value of the firm may be generalized to all other industries that have similar characteristics with banking institutions. This will aid organization in other industries with similar characteristics with banks, when making decisions on capital structure to ensure that shareholders wealth is maximized.

e) Management of firms

The relationship that exists between bankruptcy costs and the value of the firm indicates whether capital structure decisions are important, hence influencing the financing decisions of management. If bankruptcy costs, as a percentage of value of the firm is significant, it means that management needs to pay more attention to bankruptcy costs because it impacts greatly on the value of the firm.

f) Academia

This study may generate other problem areas worthy of study in relationship to bankruptcy costs and make an addition to the local studies on the impact of bankruptcy costs on the value of the firm.

CHAPTER TWO:

LITERATURE REVIEW

2.1 INTRODUCTION

The fundamental source of a company's value is the stream of net cash flows generated by its assets. This stream is usually referred to as the company's 'net operating cash flows' or 'earnings before interest and tax'.

All companies are subject to business risk. When the management of a company decides to enter a particular line of business, it knows that there are risks involved. Consequently, a company's net operating cash flows will fluctuate over time. If a company is financed entirely by equity, variations in the return to shareholders are attributable only to business risk.

When a company uses some 'fixed charge' finance, the returns to ordinary shareholders will be affected by financial leverage. An important effect of financial leverage is that ordinary shareholders are exposed to increased variability in the rate of return on their investment. Financial leverage therefore exposes shareholders to financial risk. This results from the fact that the payments to lenders and providers of other similar forms of finance are 'fixed'. These payments must be made, even if the company suffers a serious decline in its net operating cash flows. Therefore, a company's financial risk is directly related to the proportion of debt in its capital structure (VanHorne, Davis, Nicol, Wright 1990)

Bankruptcy costs will arise in a situation where debt is involved. Debt provides tax benefits to the firm. However, debt puts pressure on the firm, because interest and principal payments are obligations. If these obligations are not met, the firm may risk some financial distress.

2.2. TAX EFFECTS OF DEBT

DeAngelo and Masulis (1980) argue that there does exist a unique interior optimum capital structure. The 'market prices will capitalize personal and corporate taxes in such a way as to make bankruptcy costs a significant consideration in a tax benefit leverage cost tradeoff.' Regardless of the size of bankruptcy costs, the markets relative prices of debt and equity will adjust so that the net tax advantage of debt is of the same magnitude as expected marginal default costs. They point out that borrowing is not the only way for companies to save on taxes.

Bradley, Jarrell and Kim (1984) developed and tested a model based on the trade-off theory of capital structure. The model incorporated personal and company income taxes, costs of financial distress and the existence of non-debt tax shields such as depreciation. In testing the model, the authors regressed company average debt to total value ratios over a twenty-year period against three variables.

- A measure of earnings volatility, which was used as a proxy for the variability of a company's value; therefore, it is a measure of the risk of financial distress.
- The ratio of annual depreciation charges and investment tax credits to earnings, which was used as a measure of non-debt tax shields; and

- The ratio of advertising and research and development expenses to sales, which was used as a measure of intangible assets.

As expected, the authors found strong negative relationships between leverage and earnings volatility and between leverage and the level of advertising and research and development expenses. The relationship between leverage and non-debt tax shield act as substitutes for interest deductions associated with debt. The above study intended to capitalize the net operating profit using the return on total assets. The results of the above study concluded that the value of the firm is impacted on by leverage.

Titman and Wessels (1988) found that the measures of growth, non-debt tax shields, tangible assets and volatility of earnings did not appear to be related to leverage. The strongest results gave significant negative relationships between leverage and both uniqueness and profitability. This evidence is consistent with Titman's theory that low levels of debt will be preferred by companies in cases where their liquidation would impose high costs on customers, employees and other associates.

MacKie-Mason (1990) argues that in most cases, non-debt tax shields will cause only a small change in the probability of tax exhaustion and a similarly small change in a company's expected marginal tax rates will be small and difficult to measure. Therefore, cross sectional differences in expected marginal tax rates will be small and difficult to measure. A major problem of the previous studies is that they typically measured the leverage of companies using balance sheet ratios, which reflect the cumulative results of

many separate financing decisions made over several years. To overcome these problems it is necessary to examine individual financing decisions on a marginal basis for companies that are at, or near, the point of tax exhaustion.

Using this approach, MacKie-Mason finds strong evidence that taxes do influence financing decisions. Interest charges are tax exempt, using the argument of Modigiliani-Miller (MM1958), we can say the higher the leverage the greater the value of the firm. MM (1958) later brings in the issue of tax exhaustion and introduces bankruptcy costs which then causes the tax shield to ceases being a consideration.

However, in Kenya the bond market is not fully developed. Currently the only bonds listed in the Nairobi Stock Exchange are for East African Development Bank and Safaricom bonds.

2.3 EFFECTS OF BANKRUPTCY ON STAKEHOLDERS

Titman (1984) presents an analysis, which shows that capital structure choice affects stockholders' incentives to liquidate and determines in which state the liquidation decision is transferred to bondholders' control of the firm's assets. He also argues that the liquidation decision can impose costs on customers, as they have to get a different company to supply them with goods and services. Workers will lose their jobs and suppliers will have reduced sales. The agency relationship between the stakeholders (as stated above) and the firm can result in bankruptcy costs which are borne by the shareholders of the firm in the form of lower share prices.

Shapiro and Titman (1992) argue that the basic problem is that the threat of corporate bankruptcy provides incentives for managers and other stakeholders such as customers, suppliers and employees to behave in ways which can disrupt a company's operating activities and this decreases its value. For example, if a company is experiencing financial difficulties, managers are likely to pay less attention to issues such as product quality and employee safety thereby, leading to value loss. So managers who are well aware of the financial constraints facing the organization, may aggravate the situation further, so that loss in value to shareholders is compounded by the management's recklessness in performing their duties.

2.4 EX ANTE DEFAULT COSTS

Castanias (1983) examines the relationship between failure rates and leverage measures for smaller firms in numerous lines of business and concludes that the capital structure irrelevance hypothesis is not consistent with his results. Based on non-parametric cross sectional tests of bankruptcy risk and leverage, he finds that firms that tend to have failed also tend to have less debt. His results are stated to be consistent with the thesis that 'ex-ante' default costs are large enough to induce the typical firm to hold an optimum mix of debt and equity. This therefore implies that in Kenya the debt instruments may not be well developed because the ex-ante costs are high and the optimal capital structure requires less debt and more equity.

2.5 INTANGIBLE ASSETS

Long and Malitz (1985) tested the effects on capital structure decisions of the type of assets used by companies. In particular, they focused on the argument that intangible assets cannot support as much debt as tangible assets because they generally lose more of their value in the event of financial distress and provide greater scope for asset substitution. Their results were consistent with this argument in that advertising and research and development expenses were negatively related to leverage. They also, found that there was a strong negative relationship between leverage and operating cash flow.

They suggest that the availability of internal funds may be the most important factor in determining whether a company seeks external funds. Then if external funds are needed, the nature of its assets is important in determining the choice of debt or equity. The choice to use internal funds by the banks as was seen from the financial statements of the banks confirms that if a firm has internal funds it will have very little leverage.

Shuetrim, Lowe and Morling (1993) examined 209 Australian companies between 1973 and 1991 using a model, which incorporates both company specific factors and macroeconomic factors. Results are provided for the whole period and for the two subperiods: 1974 to 1981 and 1982 to 1990. During the first of these subperiods the Australian financial system was subject to significant regulation such as controls on interest rates and on the volume of bank lending. These controls were largely removed during the early 1980s and the two subperiods used in the study can therefore be regarded as pre and post deregulation. The company specific factors show that leverage is

negatively related to cash flow and positively related to growth, size and the level of tangible assets. No significant relationship was found between leverage and a measure of the potential tax savings associated with borrowing. However, the authors did find an industry effect in that mining and manufacturing companies tended to have lower leverage than companies in other industry groups. These differences between industries persisted after controlling for the effects of other relevant variables, but within each industry group there was considerable variation in leverage between companies, which was not explained by the model.

The overall results suggested that the macroeconomic variables used were generally not important in explaining leverage. However, the subperiods results revealed a significant positive relationship between leverage and an index of real asset prices during the post deregulation period. The relationship between leverage and size was much stronger before deregulation than after. Taken together, these two findings suggest that financial deregulation had important effects on the availability of debt finance for Australian companies and that these effects were related to company size. It appears that under regulation, large companies had substantially better access to debt finance than smaller companies. Deregulation resulted in improved access to debt finance and the improvement was relatively greater for smaller companies.

Shuetrim, Lowe and Morling (1993) estimate that to change the typical company's leverage ratio by one percentage point would require the ratio of cash flow to total assets to change by five percentage points, growth to change by 33 percentage points, and the

ratio of tangible assets to total assets to change by 10 percentage points. Therefore, cash flow and tangible assets may be regarded as economically significant, but given that growth rates of 5 to 10 percent are 'normal' the effects of growth on leverage are, in most cases, minimal. Growth is meant to take into account the inflation tendency in the economy and most economies strive to keep their inflation rate below the two-digit mark, hence, normal growth is taken to be between 5% and 10%.

It is important to find out if in Kenya the deregulation of interest rates and the Foreign Exchange may have had an impact in the banks that were placed under statutory management. The results of peculiarities of specific industries may impact on the study when trying to generalize the findings of the study to other sectors of the economy, so adjustments may need to be made to make decisions in other sectors of the economy.

Balakrishnan and Fox (1993) using data on a sample of single industry companies found that company specific effects contribute far more than industry effects to the total variation in leverage. They found that leverage was positively related to redeployable assets and negatively related to both advertising, research and development and growth. A suggested explanation is that advertising contributes to assets such as 'brand name' which, while intangible, can be bought and sold. Therefore, it is important not to assume that all intangible assets are company specific and unable to support debt. A banks most valuable asset is the confidence that depositors have in it. This confidence in the bank is an intangible asset. United Bank which was placed under statutory management in 1994, was reopened and is currently operating as Chase Bank and was ranked by the Market

Intelligence 'Banking Survey 2002' as forty-fourth out of fifty-one. While Trust Bank which re-opened under its original trade name quickly went into liquidation in 2001 after briefly going back into operation. Bullion Bank merged with Southern Credit in 2002 and it is still in operation. From the above it is implied that in the banking sector the intangible asset of 'confidence in the operations of the bank' is important when the Central Bank of Kenya is reviving a bank placed under statutory management and thus, care should be employed before placing a bank under the Deposit Protection Fund.

2.6 FINANCIAL (BANKRUPTCY) RISK AND VALUE OF THE FIRM

Gatward and Sharpe (1993) studied the capital structures of 164 listed companies in Australia over the period 1967 to 1985. They used book value data and divided capital structure into three components: equity, long term debt and short-term debt. Four variables were found to be significant in explaining the ratios of these three components of total assets (Equity, Long-term and Short-term debt) as follows:

- High profitability was associated with low levels of both types of debt.
- Companies with high growth opportunities had relatively high debt ratios.
- Large companies had relatively high debt ratios, particularly for long term debt.
- Companies that were relatively liquid had higher short-term debt and lower long-term debt than less liquid companies.

Measures designed to reflect both tax effects and the level of tangible assets were not statistically significant. In Kenya, firms financing decisions may be similarly dependent on these four variables of profitability, growth opportunities, company size and liquidity.

The study focused on profitability, growth and company size by looking at the net operating profit, return on total assets and segregation of banks into the three subsectors of large, medium and small banks (as defined by Central Bank of Kenya).

Dichev (1998) found that a firm's distress factor could be behind the size and the book-to-market effects. A natural proxy for firm distress is bankruptcy risk. If bankruptcy risk is systematic, one would expect a positive association between bankruptcy risk and subsequent realized returns. However, results demonstrate that bankruptcy risk is not rewarded by higher returns. Thus, a distress factor is unlikely to account for the size and book-to-market effects. Surprisingly, the results of the above study indicate that firms with high bankruptcy risk earned lower than average returns between 1981 to 1995. A risk-based explanation cannot fully explain the anomalous evidence. By adjusting, the return on total assets to reflect risk in the current study, should be downward instead of upward. It is possible that the trend seen over the three year period on return on total assets of the failed banks versus that of the subsector, a suitable adjustment factor may be arrived at.

Andrade and Kaplan (1998) studied thirty-one highly leveraged transactions that became financially, not economically, distressed. The net effect of the highly leveraged transactions and financial distress is to increase value slightly. This finding strongly suggests that, overall, the highly leveraged transactions of the late 1980s (in the United States of America) created value. They present quantitative and qualitative estimates of the direct and indirect costs of financial distress and their determinants of the highly

leveraged firms that faced financial distress. They estimate financial distress costs to be ten to twenty percent of firm value. For a subset of firms that do not experience an adverse economic shock, financial distress costs are negligible one year before bankruptcy.

Jensen (1991) argues that regulatory shocks and a downturn in the overall economy played a role in the default of the management buyouts completed after 1985. Kaplan and Stein (1993a, 1993b), for example, find that more than 30 percent of management buyouts completed after 1985 later defaulted. They attributed the increased default rates to poorly designed capital and incentive structures as opposed to the downturn in the economy.

Altman (1984) has estimated both direct and indirect bankruptcy costs for a sample of twenty-six bankrupt US companies. He found that in many cases the aggregate bankruptcy costs exceeded 20% of the company value just before bankruptcy. He also examined the trade-off between expected tax benefits and expected bankruptcy costs for fourteen bankrupt companies in his sample. He found that the expected bankruptcy costs exceeded the expected tax benefits for eight of the fourteen companies' one year before bankruptcy.

The above study indicates that one year before bankruptcy, the value of the firm is greatly affected as the eminent collapse of the firm has been anticipated by the market and has been factored in by the market when pricing the shares of the firm. So one year before

bankruptcy the value of the firm should be significantly affected, this therefore allows us to find out if the situation in US applies to Kenya.

2.7 EXCHANGE OFFERS AND RECAPITALIZATIONS

Smith (1986) identifies two clear findings on exchange offers and capitalization: -

1. The share market responds positively to leverage increasing transactions, and negatively to leverage decreasing transactions. For example, Masulis (1983) found an average 2 day announcement period return on ordinary shares of 14 percent where offers are made to issue debt and retire ordinary shares. For exchanges in which ordinary shares were issued and debt was retired, the share return was minus 9.9 percent over the 2-day announcement period.
2. The larger the change in leverage, the greater was the reaction of the ordinary share price.

The above study concludes that 'debt for ordinary share' offers have larger positive share price reactions than 'preference share for ordinary share' offers. Similarly 'ordinary share for debt' offers have large negative price reactions than 'ordinary share for preference share' offers.

While the positive share price effects associated with debt-for-equity transactions could be explained by company tax advantages associated with additional debt, a tax based argument is not relevant to 'preference share for ordinary share' exchanges. A possible explanation is that the announcement of these transactions can have information content.

Management's decision to decrease a company's leverage may follow receipt by management of bad economic news which has negative implications for future cash flows. Based on this revised outlook, a decrease in leverage may in fact be optimal, but announcement of the proposed decrease also conveys the bad news to the market.

Leverage on its own may not necessarily be the reason for change in value of the firm. The information content of leverage is what eventually determines whether value is affected. This also implies that the activities of the Central Bank of Kenya may be very important to the banking sector as they determine how depositors view the prospects of the operating banks and thus affecting the value of the bank.

2.8 FINANCING AS A MARKETING APPROACH

Shapiro (1992) points out that the different securities coexist for the same reason that different makes and models of cars coexist: individuals have different tastes, preferences and levels of wealth. Similarly, the capital structure decisions of companies will be influenced by the demand for different financial services, the costs of providing each package of financial services, and the level of competition from financial institutions that provide similar services.

The marketing approach suggests another way in which MM's(1958) Proposition 1 can be violated. If a company's financial manager can design a security that appeals to a particular clientele of investors, such that these investors are prepared to pay a higher price for it, the company can raise funds at a lower cost than would otherwise be the case.

The marketing approach focuses on the disequilibrium that can exist when there is some mismatch between the demands of investors and the available supply of securities.

The value of the firm in relation to bankruptcy costs may be distorted depending on marketing approach used by the borrower to entice the investor. In essence, this aims to remind us that stakeholders may not always behave in a rational manner, so when interpreting the results of this study we need to take into consideration the fact that the tastes and preferences of stakeholders are varied.

2.9 CONCLUSION

There is evidence that capital structure decisions are made systematically. Generally, this evidence comes from regression models, which find statistically significant relationships between measures of leverage and several determinants of capital structure. This type of evidence is useful but it has two important limitations.

1. The evidence is indirect in that it relates to effects of leverage rather than to effects on company value.
2. It is possible that some of the determinants are statistically significant but economically unimportant. Some indication of the economic significance of the various determinants is given by their coefficients in the regression models.

To study the bankruptcy costs and their impact on the firm, a look at the capital structure is inevitable. This may also be the reason why the literature review focuses on the capital

structure as an explanation of the findings of the study will be found from the decisions made as regards financing.

CHAPTER THREE:

RESEARCH DESIGN

The financial statements of banks sent to Central Bank of Kenya, were used as the source of the secondary data needed to formulate the regression equation. The information extracted from the financial statements was revenue, net income and the total assets of the bank. The data of the operational banks was used to determine the regression equation using Microsoft Excel. The regression equations developed were used in determining what the abnormal loss or profit of the failed bank. The difference between the actual profit or loss and the abnormal profit or loss computed using the regression equation gave rise to the indirect costs of bankruptcy.

3.1 POPULATION

The population of the study entailed all banks that had been placed under statutory management in Kenya and all the banks that were operational between 1996 to 2001. There were seventeen banks placed under statutory management between 1986 and 2002 (appendix I). The banks that were operational between 1996 and 2001 were as indicated below:-

Table 3.1 Banks Operating in Kenya Between 1996 and 2001

YEAR	Number of Banks Operating
1996	44
1997	53
1998	53
1999	51
2000	53
2001	40

3.2 SAMPLE PLAN AND SIZE

Due to lack of data for banks prior to 1996, the study focused on the eight banks placed under statutory management between 1998 and 2002 and all operational banks that had submitted their financial statements to Central Bank of Kenya between 1996 and 2002 and those that were in the business of banking as indicated in table 3.1 above.

3.3 DATA COLLECTION METHOD

Data was collected from the audited financial statements of banks submitted to the Central Bank of Kenya. From the financial statements of the banks, the total assets, revenue and the net operating income were extracted. The total assets were used to classify banks into the three categories of small, medium or large banks. Revenue of the banks which were operational in a given year were used to develop the regression equations using Microsoft Excel package. The net operating margin was used to estimate the indirect costs of bankruptcy by comparing the estimated net profit obtained by using the regression equation less the actual net profit reported in the audited accounts of the banks.

The direct costs of bankruptcy were obtained from the Deposit Protection Funds audited financial statements between 1996 to 2002 and were divided equally among the banks that were under statutory management in a given year because the break down of each failed banks' costs was not available and some of the receiver managers run two or more of the failed banks. Thus, some of the costs were being shared by the banks run by the receiver manager.

Measures of indirect bankruptcy costs are based on the forgone sales and profits concept. A methodology is specified for estimating expected profits for the period up to three years prior to bankruptcy. The expected profits computed using the regression equation is compared with actual profits (losses) of the failed bank over a three year period (two years before failure, one year before failure and the year of failure).

Indirect Costs = Abnormal Profits (losses) = Regression estimate – Actual earnings
of earnings

The data collected was grouped into two; the data of the non-failed banks was segregated from the data of the failed banks when developing the regression equation. The data of the non-failed banks was used to develop the regression equation. This is because the performance of the failed banks may lower the average performance in the category hence, making results obtained to be biased and reflect that there are no abnormal profits (losses) associated with bankruptcy.

3.4 DATA ANALYSIS

The statistical tool used in the study is simple regression analysis. The regression analysis was done in two steps:-

1. The regression equation was determined using revenue of the non-failed banks as the dependent variable and time being the independent variable. A straight line is fundamentally the best way to model the relationship between two continuous variables. The bivariate linear regression may be expressed as:-

$S_{i,t} = a + b\ S_{I,t}$

Where the variables are explained as follows:-

$S_{i,t}$ = Revenue of the failed bank in period t which could be the year 1996/97, 1998/99 and 2000/01.

$S_{I,t}$ = Aggregate revenue of the different categories of the banking industry (excluding all the failed banks) in period t which could be the years 1996/97, 1998/99 and 2000/01

Insert S I,t and estimate:

$\hat{S}_{i,t} = a + b S_{I,t}$, t = two years before failure, one year before failure and the year of failure.

Where $\hat{S}_{i,t}$ is the estimated revenue for the failed bank using the regression equation determined for the different categories of the banking industry in the given year.

3.4.1 The Steps in Determining the Indirect Costs of Bankruptcy

(i) The net profit of the banks placed under statutory management was extracted from the financial statements held by the Central Bank of Kenya for the years between 1996 and 2001(appendix III).

(ii) The banking industry was divided into three categories based on the total assets owned by the banks as is defined by the Central Bank of Kenya:-

(a) Large banks- those with total assets of more than 10,000.

(b) Medium banks- those with total assets of between 3,000 and 9,999.

(c) Small banks- those with total assets of below 2,999.

The figures of total assets are in millions of Kenya Shillings.

(iii) Revenue figures of all the banks, in each category as defined above was collected from 1996 to 2001 (appendix IV).

(iv) The net operating income of each category was obtained for the years between 1996 and 2001. The net operating income was divided by the revenue figure obtained in (iii) above to obtain the average net operating margin between 1996 and 2001. The data for the failed banks was excluded from this computation to avoid introducing bias which would indicate that the net operating margin was lower for the category than it actually was.

(v) An average revenue figure for each category was obtained by dividing the total revenue figure of the non-failed banks by the number of non-failed banks in that category between 1996 and 2001(appendix VI) to determine each category's profitability over this period (appendix VII). The estimated revenue (computed from the regression equation determined by using Microsoft Excel package) figure for each bank placed under statutory management was computed for the years between 1996 and 2001. From the above computation we were able to come up with an estimate of what the revenue of the failed bank should have been (had it not been facing bankruptcy), using the regression equation obtained using the data of the non-failed banks.

(vi) The estimated revenue figure of each bank placed under statutory management was multiplied by the net operating margin for the category obtained in (v) above to obtain the expected profit of the bank placed under statutory management (revenue of the non-failed banks in the category divided by the number of non-failed banks in the category.)

(vii) The estimated profit obtained in (vi) was then compared to the actual profit obtained by the failed banks between 1996 and 2001. This allowed us to estimate the indirect costs of bankruptcy.

(viii) The direct costs of bankruptcy were obtained from the Deposit Protection Fund.

(ix) The required rate of return for each category was computed using the actual net operating income divided by the total assets. The total assets was obtained from the financial records kept by the Central Bank of Kenya. The total assets was used to avoid any bias that may arise due to banks having different levels of debt financing in their capital structure, hence the cost of equity may vary due to the level of debt finance used.

(x) The total costs of bankruptcy was determined as the sum of the estimated indirect costs of bankruptcy and the direct costs of bankruptcy (Table 4.4).

(xi) The significance of the total costs of bankruptcy as a percentage of the value of the bank was then determined.

2. The estimated revenue for each failed bank using the regression equation determined in 1 above was weighted against the profit margin of the category which the failed bank belonged to; namely large, medium or small so as to obtain the estimated profit for the failed bank.

$$\hat{P}_{i,t} = \hat{S}_{i,t} \cdot \overline{PM}$$

Where

$\hat{S}_{i,t}$ = Estimated revenue using the regression equation for the banking sector in a given year as was previously determined in 1 above.

$\hat{P}_{i,t}$ = Estimated profits (weighting the estimate revenue with the profit margin of the relevant category to which the failed bank belonged to.)

$\overline{PM}$ = Average historical profit margin – this was determined by dividing the net operating profit by revenue for the non-failed banks in a category in a given year.

3. The actual profit of the failed bank in the year of failure was then compared to the estimated profit determined in 2 above.

That is:-

$\Delta P_{it} = P_{i,t} - \hat{P}_{i,t}$ t=1996/97, 1998/99 and 2000/01

ΔP_{it} = Unexpected profits (losses) – this was the difference between the actual profits attained by the failed bank prior to failure as compared to the estimated profit using the regression equation.

3.4.2 Regression Technique

When the observed values of X are used to estimate and predict corresponding Y values, the process is called simple prediction according to Altman(1969). This prediction is made possible using the technique called regression analysis. Regression analysis can be performed using various computer packages for example, SPSS, Micro manager, Microsoft Excel and Statagraphics.

The software used in this study was Microsoft Excel Package, which gives the regression equation. Microsoft is readily available in the personal computers in most offices in Kenya, also it is very easy to manipulate to develop the regression equation. Although it will not carry out the other statistical tests required such as F tests, T test which have to be done separately.

3.4.3 Assumptions of the model

1. Homogeneous variance- all the distributions have the same spread. The variance of the Y values where X is equal to X_1 is the same as it is where X is equal to any other value. Formally, this means that the probability distribution $p\ (Y_1/X_1)$ has the same variance as $p\ (Y_2/X_2)$ and so on.
2. Linearity- given some value X_i, there will occur a normal distribution of Y values. This distribution of Y values has a mean. The same is true if X is set equal to any other value. The mean of each of the Y distributions lies on a straight line, known as the true (population) regression line.
3. Independence- the random variables Y_1, Y_2.... .are statistically independent. For example, if Y_1 happens to be large, there is no reason to expect Y_2 to be large (or small); that is, Y_2 is statistically unrelated to Y_1. This assumption is often violated when using time series data.
4. The repeated occurrence of any value for X will be associated with many different values for Y_i. These values are normally distributed around the regression line. Since our error is the difference between Y_i and $\hat{Y}$, the error itself is normally distributed.

CHAPTER FOUR:

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The data collection exercise took longer than expected because the Central Bank of Kenya argued that the returns given to them by the banks was private and confidential. The registrar of businesses at Sheria house was not able to avail the files of the banks and there are those banks that do not adhere to the regulations laid down by the Companies Act to submit returns annually to the registrar of businesses. Kenya Revenue Authority tax payers files are weeded (Financial Statements of more than five years are removed from the file). Eventually data was obtained from Central Bank of Kenya for only a limited period as the other reports were not in their library.

The revenue in the banking sector between 1996 and 1998 was on the increase, in 1999 the revenue declined, in 2000 the revenue increased further and then declined in 2001. The revenue of the operational banks between 1996 and 2001(appendix III) classified according to size indicate that for the three categories of banks the revenue increased between 1996 and 1998, however in 1999 there was a decline. This could be attributed to the fact that the Central Bank of Kenya put several banks under statutory management because they were giving unsecured loans. With new regulations requiring them to make adequate provisions and to reevaluate how loans are offered, the banks revenues were affected making them decline. Also the treasury bills which had given them very high interest rates due to the huge domestic borrowing by the central government were replaced by treasury bonds which were less profitable. In 2000 the revenue of the small

and large banks increased slightly, this may be attributable to the banks becoming more aggressive in marketing themselves to potential customers, also there was reorganization with banks closing unprofitable branches and merging others. The medium banks revenue continued to decline. In 2001 the revenue of all the three categories declined sharply, this could be attributed to the fact that donor funding which was awaited did not materialize and the economy as a whole was on a downward trend. The banks decision to offer loans at high interest rates to compete with the treasury bill rates had caused several potential customers to turn to other sources of finance. To win back their potential customers has been an uphill task as they are better informed and want to rely on the Savings and Credit Co-operative (SACCO) to obtain loans or from the employers who charge interest rates that are minimal compared to banks. Also the banks were unable to dispose off all the security given to them by borrowers as the property market was on a down turn and most of the securities held were in the form of title deeds.

The net profit of the banking sector as an industry between 1996 and 1998 was on an increase, between 1999 and 2001 it was on a decline (appendix IV). The net profit margin of the small banks between 1996 and 1998 was on the increase, between 1999 and 2000 the net profit margin was on a decline and in 2001 it increased yet again. The medium banks' net profit margin increased between 1996 and 1997 was on a decline between 1998 and 1999, then increased between 2000 and 2001. For the large banks the net profit margin declined between1996 and 1997, increased between 1998 and 1999 declined in 2000 and increased in 2001 (appendix VI). The net profit is the difference between the revenue and the expenditure incurred by the bank. The trend of the net profit

should be similar to the revenue trend, any difference in trend can be attributed to the expenses of the bank. Thus, the analysis of the net profit margin indicates that the expenditure by the banks is highly variable. The net profit margin decreased between 1996 and 1998 because of the banks being required to make adequate provisions for doubtful and bad debts. This affected the small and medium banks most probably because their accounting procedures were lax. The Central Bank of Kenya did not follow up on the banks which had failed to send their quarterly financial statements to them. The large banks who are also quoted in the Nairobi Stock Exchange, had to adhere to strict accounting principles and all the laid down regulations by the Capital Market Authority which is more keen than most other regulatory bodies.

The findings are presented to cover the objectives of the study, the estimated indirect costs of bankruptcy were obtained first and they are presented in the table 4.1.

4.2 INDIRECT COSTS OF BANKRUPTCY

The indirect costs of bankruptcy are defined for the purposes of this study as the difference between the estimated net profit of the failed banks and the actual net profit or losses reported by the banks that failed.

Table 4.1 Indirect Costs of Bankruptcy

			Indirect Costs of Bankruptcy (In Millions of Kshs)		
Bank	**Year of Failure**	**Category**	**Two years before failure**	**One year before failure**	**Year of failure**
Euro Bank	2003	Small	711	1315	*
Daima Bank	2002	Small	195	711	1315
Delphis Bank	Jun-01	Medium	5224	11886	9291
City Finance Bank	Nov-98	Medium	5537	9816	62773
Prudential Bank	Nov-98	Small	1434	1866	2772
Bullion Bank	Sep-98	Small	1435	1730	2827
Reliance Bank	Sep-98	Small	1443	1738	2892
Trust Bank	Sep-98	Large	64376	82398	3159274

Source: Central Bank of Kenya

*-data was not available

To obtain the indirect costs of bankruptcy the regression equations developed using Microsoft Excel Package were used to calculate the estimated revenue of the banks by using the average revenue of the banks that were operational. The average revenue of the banks was obtained by dividing the total revenue of the banks in the category, by the number of banks operating in that year (appendix V). The estimated revenue computed using the regression equation was taken as the revenue that the bank should have earned had it not been placed under statutory management (appendix VII).

The estimated revenue was multiplied by the net profit margin of the bank category to obtain the expected net profit of the banks placed under statutory management if they had been operationally healthy (appendix VIII). The net profit margin was computed by dividing the

actual net profit of the banks that were operating in that particular year by the actual revenue of banks operating (appendix VI). The estimated net profit (appendix VIII) was compared with the net profit or loss reported by the banks placed under statutory management. The difference between these figures is what is the estimated indirect costs of bankruptcy which are reported in Table 4.1. The actual net profit or loss of the banks placed under statutory management are shown In appendix IX.

4.3 DIRECT COSTS OF BANKRUPTCY

The direct costs of bankruptcy are defined as the costs incurred by the failed bank by virtue of being placed under statutory management. This include the legal costs incurred in taking the loan defaulters to court to recover money owed to the institution. The study hoped to get the direct costs of bankruptcy for each of the institutions placed under statutory management but it was not possible as the information was only available in the form of the audited financial statements of Deposit Protection Fund. Since, there was no evidence to indicate that a particular bank had incurred more of the liquidation costs than the others. The costs were thus, assumed to accrue uniformly to all the banks under statutory management. The average direct costs of bankruptcy for a bank in Kenya are indicated below:-

Year	Average Direct Costs of Bankruptcy (In Millions of Kshs)
1996	3.25
1997	20.59
1998	6.82
1999	56.59
2000	2.35
2001	14.95
2002	10.29

Source: Central Bank of Kenya

4.4 TOTAL COSTS OF BANKRUPTCY

The total costs of bankruptcy were obtained as the summation of the direct costs of bankruptcy and the indirect costs of bankruptcy. For the number of banks placed under statutory management in 1998 for all the three categories of banks, the costs of bankruptcy increased as bankruptcy approached. The costs were at their highest in the year of Failure. The costs also were highest for Trust bank which was the largest bank that failed, followed by the costs of City Finance bank which was a medium bank. The small banks had the least costs. In 2001 Delphis bank which was a medium bank failed, the costs increased between two years and one year before failure before the costs went down in the year of failure.

In 2002 and 2003 the banks that failed were small banks and the costs increased gradually as each bank approached failure. This indicates that as bankruptcy approaches, the situation cannot be kept hidden as those and most of the stakeholders are wary of the bank's conditions and prefer to minimize the transactions they enter into with the bank, hence the operations of the bank are curtaile Table 4.2 shows the bankruptcy costs between two and one year before failure and in the year of Failure.

Table 4.2 Total Costs of Bankruptcy (In Millions of Kshs)

Bank	Date bank failed	Size of the bank	Total Bankruptcy costs		
			Two years before failure	One year before failure	Year of failure
Euro Bank	2003	Small	725.95	1325.29	*
Daima Bank	2002	Small	197.35	725.95	1325.29
Delphis Bank	Jun-01	Medium	5280.59	11888.35	9305.95
City Finance Bank	Nov-98	Medium	5540.25	9836.59	62779.82
Bullion Bank	Sep-98	Small	1438.25	1750.59	2833.82
Reliance Bank	Sep-98	Small	1446.25	1758.59	2898.82
Prudential Bank	Nov-98	Small	1437.25	1886.59	2778.82
Trust Bank	Sep-98	Large	64379.25	82418.59	3159280.82

Table 4.3 The Mean of Total Bankruptcy Costs as per Category between Two Years Before Failure and the year of Failure (In Millions of Kshs)

Year of Failure	Size of the Bank	Two Years Before Failure	One Year Before Failure	Year of Failure
1998	Small	1440.58	1798.59	2837.15
1998	Medium	5540.25	9836.59	62779.82
1998	Large	64379.25	82418.59	3159281
2001	Medium	5280.59	11888.35	9305.95
2002	Small	197.35	725.95	1325.95
2003	Small	725.95	1325.95	*

*- the data was not available

From table 4.3 the total bankruptcy costs increased as failure approached. The trend was the same for the three categories except for 2001, when the medium banks total costs of bankruptcy decreased in the year of failure as compared to the costs one year before failure. This could be a unique feature of the bank placed under statutory management, rather than a trend as only one bank was considered in the analysis.

Table 4.4 Actual Total Assets of the Banks as reported in the Audited Financial Statements (In millions of Kshs)

Bank	Date bank failed	Size of the bank	Actual Asset Value		
			Two years before failure	One year before failure	Year of failure
Euro Bank	2003	Small	1435	*	*
Daima Bank	2002	Small	797	750	*
Delphis Bank	Jun-01	Medium	4385	3646	2160
City Finance Bank	Nov-98	Medium	3460	3576	889
Bullion Bank	Sep-98	Small	1629	1965	1547
Reliance Bank	Sep-98	Small	2333	2154	963
Prudential Bank	Nov-98	Small	1077	890	477
Trust Bank	Sep-98	Large	13218	14424	8707

* data is not available

Among the banks that failed in 1998, the small banks value declined between two years and the year of failure, however, for Bullion bank the value increased one year before failure and declined in the year of failure. Bullion bank was allowed to operate again by the Central Bank of Kenya and has since merged with Southern Credit bank.

For the medium banks and the large bank, the value of the banks increased slightly between two years before failure and one year before failure before declining in the year of failure. The medium and large banks total assets may have increased one year before being placed under statutory management because management may have been able to convince the various stakeholders that the problems being experienced in the previous year had been resolved and that they need not be pessimistic. Also the management may have been able to their financial statements manipulated to give a favorable picture of their performance. Alternatively the security given on the loans/advances may have been taken over by the banks and were reflected in their financial statements, if the security was not sold for what it was worth then this may have resulted in the decline in value in the year of failure. The customers of the small banks may only be making deposits and making withdrawals and may not be aware that the viability of a bank is not measured by its ability to take deposits or to facilitate withdrawals. The customers may not be able to analyze the information contained in the financial statements to find out whether the bank is still a going concern. The customer of the large banks are more likely to be informed and will look at various parameters when selecting the bank where they will take their business, this may account for why the bankruptcy costs of the large banks are higher than those of the medium and small banks. The customers of the small and medium banks may

be attracted by the very good returns promised by banks on the verge of collapse because before bank failures became frequent most depositors believed that their money was safe in the bank rather th investing their money in other assets because of the liquidity afforded to them by the bank deposits. The customers of the large banks are aware that they can invest offshore and can readily convert assets into cash when the need arises.

The larger a bank is the greater the confidence stakeholders have in its ability to operate as a going concern. This may explain why the value of the bank is greatly affected as the bank approaches bankruptcy as the going concern assumption is put to doubt.

Table 4.5 Total Bankruptcy Costs as a Percentage of Total Assets

Bank	Date bank failed	Size of the bank	Two years before failure	One year before failure	Year of failure
Euro Bank	2003	Small	50.59	*	*
Daima Bank	2002	Small	24.76	96.79	*
Delphis Bank	Jun-01	Medium	120.63	326.07	430.83
City Finance Bank	Nov-98	Medium	160.12	275.07	7061.85
Prudential Bank	Nov-98	Small	88.29	89.09	183.18
Bullion Bank	Sep-98	Small	61.99	81.64	301.02
Reliance Bank	Sep-98	Small	133.45	211.98	582.56
Trust Bank	Sep-98	Large	487.06	571.40	36284.38

Source: Table 4.3 and 4.4

*** data was not available**

The total costs of bankruptcy as a percentage of the total assets as indicated in table 4.5 above shows that they increased as bankruptcy approached. The costs were lowest two years before failure and were highest in the year of failure. The total bankruptcy costs contribute largely; to the value of the bank, as in most of the banks the costs were above

fifty percent. This means that the stakeholders should be careful to factor in the probability of financial distress when evaluating financing and investment decisions.

The bankruptcy costs are determined by how close to failure the bank is, if the costs are above fifty percent then failure of the bank is fast approaching and there is need for the stakeholders to take action to minimize loss to their total wealth. The banks all have lower bankruptcy costs two years before failure and the costs continue to increase and peak in the year of failure.

However, the total bankruptcy costs were noted to vary as per the bank category. The small banks had less costs of bankruptcy as opposed to the large banks (Table 4.6). This may be accounted by the type of customers that each bank has, the large bank is likely to have clientele who are coporate entities who have very strict guidelines in selecting who shall act as their bankers. The small and medium banks will have the small depositors as their clientele. Given the amounts of money the customers have in the bank, the customers of the large bank will want to monitor the bankers financial performance frequently as they have the necessary skills to do so and the management may have stipulated that such reports be included in the management reports. While the customers of the small and medium banks may never be bothered to evaluate the banks performance because they may not be interested and may lack the necessary skills to evaluate the banks financial statements.

Table 4.6 The Mean Bankruptcy Costs Per Category Over Study Duration

	Total bankruptcy costs as a percentage of total assets as per category		
Bank category	**Two years before failure**	**One year before failure**	**Year of failure**
Small	71.816	119.875	355.59
Medium	140.375	300.57	3,746.34
Large	487.06	571.40	36,284.38

Table 4.7 F Values Computed to Determine the Difference in Mean of the Banks as per Category

Bank category	**Two years before failure**	**One year before failure**	**Year of failure**
Small	8.77	19.84	65.22
Medium	14.03	2.28	6,065.92
Large	1.60	45.15	9.29

The F values were computed by dividing the mean of the each category for the years under review with the means of the other categories. For instance the mean of the large banks in the year of failure was divided by the mean of the small banks in the year of failure to arrive at the F value for the large banks in the year of failure.

At 90% confidence level the means were significantly different as per the category of the bank. That is the mean of the large bank, the medium bank and the small bank are not equal. This may be because the different customers in each banking category will have

access to different information and that they will each react differently once they have the information. For instance, the customers of the large banks who are likely to be mostly coporate entities will have information that is private, and will act promptly on the information. The customers of the medium and small banks will have access to public information and they may not act promptly on it. Thus, bankruptcy costs tend to have a greater impact given the level of information available and how that information is used by the investor/depositor.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The objectives of the study as outlined in chapter one aimed at determining the level of bankruptcy costs as a percentage of the value of the bank and determining whether the relationship between bankruptcy costs and value of the bank varies with the size of the bank. It was found that bankruptcy costs are significant as a percentage of the value of the firm and that they vary significantly as a result of size of the bank.

5.2 BANKRUPTCY COSTS AS A PERCENTAGE OF VALUE OF THE BANK.

The costs of bankruptcy in all the banks placed under statutory management indicates that they are significant and they range above at least fifty percent two years before failure and increases to over hundred percent in the year of failure. The bulk of the costs are in relation to indirect costs. These costs are in relation to lost deposits of the bank and the employees of the bank especially those who are well qualified that may look for employment elsewhere as they are sure that the bank is likely to fail. The suppliers of the bank may also refuse to provide essential services and goods on credit because they feel that payments may not be forth coming. Although these costs may not be sufficiently accurate given the sample sizes involved which are small especially for the large and medium bank category which have one and two banks in the sample respectively. They give an estimate of how high the indirect costs of bankruptcy are in Kenya.

5.3 THE RELATIONSHIP BETWEEN BANKRUPTCY COSTS AND THE VALUE OF THE BANK

The bankruptcy costs increased as failure approached, while the total assets of the bank decreased as failure approached. The relationship between bankruptcy costs and the value of the bank is negatively related. The bankruptcy costs increased in the year the bank was placed under statutory management, the bankruptcy costs were highest because employees and suppliers of the banks may have withdrawn their services because they viewed the banks as not being likely to continue with operations. This might have been signaled to the depositors who may then have been in a hurry to withdraw their money. When the banks are placed under statutory management the activities of the bank are curtailed and the depositors are restricted from withdrawing their money, suppliers of the bank are paid on a preferential basis and no new ventures are undertaken. This may be the reason why the bankruptcy costs increased over time.

The decline in the total assets of the bank may be as a result of the financial statements which had been manipulated over time being questioned by investors and depositors who may not have been convinced that they are true and fair as relates to the banks performance. When the banks were placed under statutory management any manipulation to the financial statements may have been reversed because the Central Bank of Kenya may have noticed after analysis of the quarterly accounts that the bank were not performing to the expected standards. This may have then prompted the failed banks to stop manipulating their financial statements which may have resulted in reduced total assets and increased bankruptcy costs. Also, the current assets may have declined

especially the cash and bank balances, prepayments, the debtors may have declined as the provisions for bad and doubtful debts increase as bankruptcy approached and this resulted in reduced total assets for the failed banks.

5.4 THE TREND OF BANKRUPTCY COSTS IN RELATION TO SIZE

There was a trend discerned in the way bankruptcy costs behaved over time in that as failure approached, the costs of bankruptcy increased for each of the category of banks. This may be attributable to the fact that the operations of the banks have been affected adversely as the banks fail to deliver services or satisfaction to the various stakeholders who are likely to decide to transact with the other operating banks.

It was also noted that the size of the bank affected the magnitude of the bankruptcy costs. The small banks had the least costs of bankruptcy, followed by the medium banks and the largest costs of bankruptcy were found with the large banks. This is possibly because the large banks are likely to have coporate clientele who are likely to notice any significant change in the services they receive from their bankers. The small banks have clientele composed mostly of small depositors who make occasional deposits and withdrawals and may not have felt a change in the services rendered by their bankers until when they find a notice on the door informing them that the bank is under statutory management. The coporate clientele are well informed and are able to read the financial statements and thus make decisions promptly, while the small depositors may not have ready access to financial statements thus they may not make well informed decisions.

5.5 IMPLICATIONS OF FINDINGS AND RECOMMENDATIONS

The findings of the study imply that bankruptcy costs are significant in the valuation of the bank. The Central Bank of Kenya should be quick to place banks under statutory management when they are noted to be experiencing financial distress, as this reduces the bankruptcy costs significantly. It also indicates that there is a significant difference in the banks bankruptcy costs that are as a result of size given the F tests result at 90% confidence level. Thus, the larger a bank is the greater the urgency to place it under statutory management and reorganize it to reduce the bankruptcy costs incurred.

The Central Bank of Kenya needs to look at ways of encouraging mergers among the banks so that once they are revived, the depositors are not put off by the old name. Also if the banks could be placed under statutory management within the shortest time after any financial problems are noted, then the banks may continue operating with very little negative impact on their value after re-organisation by the Central Bank of Kenya.

Other industries and the economy as whole should be careful about bankruptcy costs because if they are over 100% of the value of the bank, they are likely to be significant in the economy and this may account for the negative and minimal growth rate experienced by Kenya in the last three years.

The Kenyan business person needs to be educated on the value of good management because the banks placed under statutory management had principally been mismanaged. The costs of mismanagement are extremely high and at all costs, only those who are well

qualified and have a proven record of accomplishment should be given the opportunity to hold positions of influence in banking organizations. This will reduce the current problems of little or minimal development in the economy.

5.6 LIMITATIONS OF THE STUDY

- The study would have been improved had the data from the Central Bank been available for years prior to 1996. This would have made the regression equation have a better fit and thus it could have been used to estimate the total income more accurately.
- The data on direct costs of bankruptcy had to be divided equally among the failed banks. If the costs had been assigned to the banks as incurred the results would have been more accurate especially for each of the failed banks.
- The study did not incorporate the effect of the economy on the value of the firm. The indirect cost of bankruptcy may be as a result of a downturn in the economy and not mismanagement of the institution.
- The data was not adjusted for inflationary tendencies especially as data was combined for several years, whose inflation may not be comparable.

5.7 SUGGESTED AREAS FOR FURTHER RESEARCH

- A similar study could be carried out in other industries or the economy as a whole. This will give an idea on how the bankruptcy costs affect the economy.
- A similar study could be carried out with data that has been adjusted for inflation.
- Factors that contribute to bankruptcy costs and financial distress in firms in Kenya.

- Alternative ways to measure bankruptcy costs should be looked into.

5.8 CONCLUSIONS

The study was able to show that the indirect costs of bankruptcy are high, all those found to be inefficient managers should not be allowed to hold positions of authority as they erode whatever value the firm had. The confidence of the stakeholders is critical especially in situations where the business of the firm depends on the goodwill of the citizen.

The differences of firms as relates to size may be important in influencing their potential costs of bankruptcy. All banks are affected by bankruptcy costs with the larger banks having high bankruptcy costs, and this may be attributtable to how well informed the clientele of the bank is and how quickly they act on the information available to them.

REFERENCE

1. Altman E.I. December, 1969 'Corporate bankruptcy potential, stockholders returns and share valuation.' *The Journal of Finance*, pp.887-900. Vol.24
2. Altman E.I. September 1984 'A further empirical investigation of the bankruptcy cost question,' *Journal of Finance*, pp.1067-1089. Vol.39
3. Andrade G. & Kaplan S.N. October 1998 'How costly is financial (not economic) distress? Evidence from highly leveraged transactions that became distressed.' *Journal of Finance*, pp.1443-93. Vol.53
4. Asquith P, Gertner R, Scharfstein D 1994 ' Anatomy of financial distress: An examination of junk bond issuers' *Quarterly Journal of Economics* 109, 625-58. Vol.50
5. Balakrishnan S. and Fox I. January 1993 'Asset Specificity, firm heterogeneity and Capital structure', *Strategic Management Journal*, pp.3-16. Vol.20
6. Bett K.A.K. 1992 'Financial performance of the banking sector. The case of Kenyan banks and financial institutions.' An unpublished MBA project (University of Nairobi).
7. Bishop S.R, Crapp H.R and Twite G.J 1998 'Corporate Finance' 2nd Ed, Holt, Rinehart and Winston pp. 250-259
8. Bradley M., Jarrell G. & Kim E.H, July 1984 'On the existence of an optimal capital structure: Theory and evidence', *Journal of Finance*, pp. 857-78. Vol.39
9. Castanias R. December 1983 'Bankruptcy risk and optimal capital structure.' *Journal of Finance*, pp.1617-35. Vol.38

10. DeAngelo H. and Masulis R. March 1980 'Optimal capital structure under corporate and personal taxation', *Journal of Financial Economics*, pp. 3-29. Vol.35

11. Dichev I.D. June 1998 'Is the risk of bankruptcy a systematic risk?' *Journal of Finance*, pp.1131-1148. Vol.53

12. Gatward P. & Sharpe S. 1993 'Capital structure dynamics with interrelated adjustment: Australian evidence', University of New South Wales, School of Banking and Finance, *working paper* No. 53.

13. Gilson S. 1997, 52 'Transactions costs and capital structure choice: Evidence from financially distressed firms', *Journal of Finance*, 161-197. Vol.52

14. Hotchkiss E. 1995, 50 'Post bankruptcy performance and management turnover', *Journal of Finance*, 3-22. Vol.50

15. Jensen M. 1991, 4 'Corporate control and the politics of Finance', *Journal of Applied Corporate Finance*, 13-33. Vol.46

16. Kaplan S.N & Jeremy S. 1993a, 108 'The evolution of buyout pricing and financial structure in the 1980's', *Journal of Economics*, 313-358. Vol.48

17. Kaplan S.N & Jeremy S. 1993b, 6 'The evolution of buyout pricing and financial structure (or what went wrong) in the 1980's', *Journal of applied Corporate Finance*, 72-88. Vol.47

18. Long M 7 & Malitz I. 1985 'Investment patterns and financial leverage', *Corporate Capital Structures in the United States*, Ed. B. Friedman, University of Chicago Press, pp. 325-51.

19. LoPucki L. & Whitford W. 1993b, 78 'Patterns in the Bankruptcy reorganization of large, publicly held companies', *Cornwell University Law Review*, 597-618.

20. MacKie-Mason G. December 1990 'Do Taxes Affect Corporate Financing Decisions?', *Journal Of Finance*, pp.1471-93. Vol.45

21. Market Intelligence 'Banking Survey 2002.' ISSN 1029-2195.

22. Market Intelligence. May 1999. 'Kenya's top banks.'

23. Masulis R. March 1983 'The Impact of Capital Structure Change on the Firm Value: Some Estimates', *Journal of Finance*, pp.107-126. Vol.38

24. Modigliani F and Miller M.H. June 1958 'The cost of capital corporation finance and the theory of investment' *American Economic Review* PP 261-297.Vol.13

25. Shapiro A. and Titman S. 1992 'Intergrated approach to corporate risk management' in *The Revolution in corporate Finance*, Eds J. Stern & D. Chew, 2nd Ed, Blckwell, Oxford, pp.331-45.

26. Shapiro A.C. 1992 'Guidelines for corporate financing strategy, in *The Revolution In Corporate Finance*, 2nd Ed., Eds Stern & D. Chew, Blackwell, Oxford, pp. 217-30.

27. Shuetrim G, Lowe P. & Morling S. December 1993 ' The determinants of corporate leverage: A panel data analysis', *Research Discussion Paper* 9313, Reserve Bank of Australia.

28. Smith C.W. Spring 1986 'Raising Capital: Theory and Evidence', *Midland Corporate Finance Journal*, pp. 6-22. Vol.41

29. Titman S. and Wessels R. March 1988 'The determinants of capital structure choice', *Journal of Finance*, pp.1-19. Vol.43

30. Titman S. March 1984 'The effect of capital structure on a firm's liquidation decision', *Journal of Financial Economics*, pp.137-51. Vol.39

31. VanHorne J, Davis K, Nicol R, Wright K 1999 'Financial Management and Policy' 3rd Ed, Prentice Hill pp.315-320.

32. VanHorne J.C. June 1976 'Optimal initiation of bankruptcy proceedings by debt holders', *Journal of Finance*, pp.897-910. Vol.31

33. Warner J. May 1977' Bankruptcy costs some evidence' *Journal of Finance*, pp.337-48. Vol.32

34. White M.J. May 1983 'Bankruptcy costs and the new bankruptcy code,' *Journal of Finance* . pp. 423-445. Vol.38

Appendix I. Failed Banks (Source: Central Bank of Kenya 09.08.2001)

Bank Name	Date Closed or Restructured	Reasons For Failure
Continental Bank.	August 1986.	-Non performing loans. -Insider loans (Unsecured).
Union Bank of Kenya Limited.	December 1989.	-Mismanagement. - Poor credit policies.
Exchange Bank Limited.	April 1993.	-Violation of Banking Act, lincence revoked.
Trade Bank.	August 1993.	-Malpractice's in forex. -Non-performing loans.
Pan Africa Bank Limited.	October 1993.	-Violation of Banking Act, lincence revoked.
United Bank Limited.	August 1994.	Successfully restructured now Chase Bank.
Heritage Bank Kenya Limited.	September 1996.	-Non-performing loans. -Malpractice by directors.
Kenya Finance Bank Limited.	July 1996.	-Non-performing loans. -Mismanagement.
Reliance Bank Limited.	September 1998.	- Run on deposits. - Cheque Kiting.
Bullion Bank Limited (Merged with Southern Credit Bank).	September 1998.	- Run on Certificate of deposits.

		- Non performing loans.
Prudential Bank Limited.	November 1998.	-Non-performing loans. -Mismanagement.
City Finance Bank Limited.	November 1998.	-Run on deposits. - Mismangement.
Trust Bank Limited (Came out of statutory management briefly before going into liquidation).	September 1998.	-Run on deposits. - Mismangement.
Delphis Bank Limited.	June 2001.	-Mismanagement. -Political interference -Run on deposits
Daima Bank	2002	-Mismanagement. -Political interference -Run on deposits
Euro Bank	2003	-Mismanagement. -Political interference -Run on deposits

Appendix II The banks operating in Kenya between 1996 and 2001(Source: Central Bank of Kenya)

Banks	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Small	18	25	22	18	21	13
Medium	12	14	15	18	17	17
Large	7	6	8	8	9	8
Total	**37**	**45**	**45**	**44**	**47**	**38**

Appendix III Total revenue of the banks based on size of the banks between 1996 and 2001(In Millions of Kshs) (Source: Central Bank of Kenya)

Bank	1996	1997	1998	1999	2000	2001
Small	3921	5937	6991	4543	4965	2458
Medium	9097	16128	16789	12512	12208	6822
Large	42747	48432	54272	43815	45839	34075
Total	**55765**	**70497**	**78052**	**60870**	**63012**	**43355**

Appendix IV: Total Net Profit as per the size of the banks between 1996 and 2001 (In Millions of Kshs) (Source: Central Bank of Kenya)

Bank	1996	1997	1998	1999	2000	2001
Small	624	1053	1303	731	735	948
Medium	1618	3311	3120	2065	2544	1864
Large	10991	12046	14267	13495	11685	9990
Total	**13233**	**16410**	**18690**	**16291**	**14964**	**12802**

Appendix V: Average Revenues of the Banks based on size between 1996 and 2001 (In Millions of Kshs) (Computed from table IV)

Bank	1996	1997	1998	1999	2000	2001
Small	217.83	237.48	317.77	252.39	236.43	189.08
Medium	758.08	1152	1119.27	695.11	718.12	401.29
Large	6106.71	8072	6784	5476.88	5093.22	4259.38

Appendix VI: Average Net Profit Margin as per size between 1996 and 2001(Source: Central Bank of Kenya)

Bank	1996	1997	1998	1999	2000	2001
Small	0.15914	0.17736	0.18638	0.16091	0.14804	0.38568
Medium	0.17786	0.2053	0.18584	0.16504	0.20839	0.27323
Large	0.25712	0.24872	0.26288	0.308	0.25491	0.29318

Appendix VII: Estimated Revenue for the banks as per size for the years between 1998 and 2001 (In Millions of Kshs) (Source: Central Bank of Kenya)

Bank	1998	1999	2000	2001
Small	13224.68	16498.08	1007.643	-1842.29
Medium	330787.7	31870.44	-60602.6	-35551.9
Large	12004818	2998664	-664604	-1559869

Appendix VIII: Estimated Net Profit for the banks by size between 1998 and 2000 (In Millions of Kshs)

Bank	1998	1999	2000
Small	2464.849	2654.655	149.1677
Medium	61472.24	5259.948	-12628.9
Large	3155821	923587.2	-169417

Appendix IX: Actual Net Profit or Net Losses reported by the banks Placed under Statutory management (In Millions of Kshs) (Source: Central Bank of Kenya)

			Actual Net Profit or Loss		
Bank	Date placed under statutory management	Size of the bank	1998	1999	2000
City Finance Bank	Nov-98	Medium	-1301	-1089	-122
Delphis Bank	Jun-01	Medium	47	36	-743
Daima Bank	2002	Small	64	-84	-46
Bullion Bank	Sep-98	Small	-362	-343	-122
Reliance Bank	Sep-98	Small	-427	-118	0
Prudential Bank	Nov-98	Small	-307	0	0
Trust Bank	Sep-98	Large	-3453	-1804	104
Euro Bank	2003	Small	18	26	15