EFFECT OF ASSET RESTRUCTURING ON FINANCIAL PERFORMANCE OF TIER THREE COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

Declaration
This research project is my original work and therefore has never been presented to any institution of higher learning.

Signature ....................................... Date........................................

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Recommendation by the Supervisors
This research project has been submitted for examination with our approval as the university supervisors.

Signature ....................................... Date........................................

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DEDICATION

To my lecturers, family and friends may this work be a living proof that hard work, persistence, patience, and prayers can make you actualize your dreams.
ACKNOWLEDGMENT

I would like to thank the Almighty God for his guidance and the protection, for having brought me this far. Special thanks go to my supervisors, Dr. Fred Wafula, for providing invaluable guidance throughout this study. Your immense guidance and knowledge of the subject matter enabled me to shape this research proposal to the product that it is now. I am also grateful to my friends and MBA Colleagues for their support throughout the program. Finally, I would like to thank my family for their financial and moral support for the achievement of this research.

Thank you All and May God bless you.
LIST OF ABBREVIATIONS AND ACRONYMS

ALM - Assets Level Management
CAR - Capital adequacy ratio
CBK - Central Bank of Kenya
DV - Dependent Variable
CDS - Credit Default Swap
EPS - Earnings per Share
GDP - Gross Domestic Product
GoK - Government of Kenya
ICT - Information and Communications Technology
IMF - International Monetary Fund
IRB - Internal Rating Based
IRR - Internal Rate of Return
IV - Independent Variable
KBA - Kenya Bankers Association
KRI - Key Risk Indicator
KSH - Kenya Shilling
KPI - Key Performance Indicator
MIS - Management Information System
NBFIs - Non-Bank Financial Intermediaries
NPAs - Non-performing asset
NPL - Non-Performing Loans
NPV - Net Present Value
NSE - Nairobi Securities Exchange
PWC - Price Waterhouse Coopers
ORM - Operational Risk Management
R&D - Research and Development
RAROC - Risk-Adjusted Return on Capital
ROI - Return on Investment
ROE - Return on Equity
SPSS - Statistical Package for Social Sciences
WOA - Written Off Assets
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OPERATIONAL DEFINITION OF TERMS

In this research, the following terms will be used according to the definitions given below:

**Asset Restructuring.** According to Hoskisson, et al. (2012), refers to “the process of managing the bank into the self-sufficient tactical corporate unit, divestment of lines of corporate not appropriate to the core business, acquiring companies that relate to and strengthen the core, discounting unpromising products, and forming strategic alliances, joint ventures and licensing agreements”.

**Non-performing asset** (NPA). According to Upadhyay & Gupta (2020), NPA is defined as “a credit facility in respect of which the interest and/or installment of bond finance principal has remained ‘past due’ for a specified period of time”.

**Profitability.** According to Naidoo (2018) defined probability as “the ability of a business to earn a profit while a profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue and other expenses related to the conduct of the business activities”.

**Restructured loans.** According to Valencia & Laeven (2012), restructured loans is defined as “the assets which have got an extended repayment period, reduced interest rate, converting part of the loan into equity, providing additional financing and some combination of these measures. Hence, under restructuring, a bad loan is modified as a new loan”.

**Restructuring.** According to Garavan, et al. (2014), restructuring is defined as “an act of reorganizing the ownership, operational, legal or other structures of a company for the purpose of making it more profitable and better organized for its current needs”.

**Written off assets.** According to Ricks (2020), refers to “a situation in which lender of a bank doesn’t tally the money borrower owes to it. The banks financial statement will specify that the written off assets are compensated through some other way”.
ABSTRACT
The study objective aimed at establishing the effect of asset restructuring on tier three commercial banks in Kenya financial performance. Generally, when asset restructuring is employed by the firm’s management then it should have some effects on the profitability of banks. Therefore, a study was conducted on the tier three commercial banks in Kenya, which is the registered under Central Bank Act and which was in operation during this research period from 2010 to 2019. The ratios that make the variables under consideration on non-performing assets, written off assets, restructured loans and asset assets management level was computed from the data collected and extracted from CBK reports and the respective banks annual financial statements. The data collected from the secondary sources was then cleaned, coded, and analyzed using statistical package for social science. The theories guided the study include gambler’s ruin theory, free cash flow of cash management theory and the resource-based credit risk modeling theory. The study found out that non-performing loans have a negative and statistically significant effect on the financial performance of tier three commercial banks in Kenya, found that non-performing assets had a statistically positive significant effect on the profitability of tier three commercial banks. The study established that written off assets had a positive and statistically insignificant effect on the profitability of tier three commercial banks in Kenya. The study concluded that financial performance in tier three commercial banks is most likely to be caused by non-performing loans as a variable in asset restructuring. The study recommends that the tier three commercial banks should review their loan criteria and procedures to reduce the cases of default. Additionally, the written off assets criteria needs to examined if the tier three commercial banks are to attain financial stability. The study had a secondary data limitation which was obtained from the supervisory report by the CBK and individual banks audited financial statements. Further, the study recommends that the government should review the liquidity requirements of banks as the liquidity does not help in generating income. The finding of this study will offer insight to fiscally Kenyan distressed banks on the asset restructuring effect in order to enhance the profitability of their financial institutions with an opinion to ensure sustainability in a competitive financial market while meeting their social objective.

Keywords: Asset Restructuring, written off assets, Non-performing assets, Asset level management, Restructured loans, Profitability, financially distressed, National Banks of Kenya
CHAPTER ONE
INTRODUCTION

1.1.1 Background to the Study

According to Karacadag & Taylor (2000) stated that asset restructuring involves reducing the poor performance in banks by increasing the liquidity of assets by holding more of current assets while ensuring that a large proportion is financial assets, and reducing the level of non-performing loans through provisioning for problem loans and selling off bad loans while he also noted that “Capital restructuring involves increasing the financial performance in banks by way of substitution of short-term debt and junior long-term debt with longer-term debt obligations (by converting debt to equity) to increase the financial structure of banks”. It sometimes involves direct capital injection by the shareholders and other times a bailout by government whereby additional capital is channeled into the banking entity by government (Dziobek and Pazarbasioglu, 1998; Rose, 1994). Therefore, it can be noted that restructuring is concerned with changing structures in pursuit of a long run strategy and with objective of restructuring is to transform the company into an initiative that is of high value to its owners.

According to Osman (2020), in a study carried out in the USA indicated that “when a firm or entity experiences a period of time when it cannot pay its bills and other obligations by their due date, it is likely undergoing financial distress where this expenses may include opportunity costs of projects, expensive financing and employees who are not productive. Employees of a distressed company typically have the lower determination and higher stress caused by the increased chance of bankruptcy which could force them out of their employment”.

In a research carried out in Nigeria, on financially distressed banks by Johnson (2018) he stated that “firms under financial distress might find it challenging to access capital markets and secure financing. It is imperative to note that the firms may also find their market worth falling significantly. These results from consumers who decide to roll back or decide on cutting back orders. It is a difficult situation and as well the suppliers will also choose to change their terms of delivery because they lack the confidence of getting paid. The major tools that a company uses to assess itself, including considering a corporation's financial statement can assist investors and others determine its financial well-being”. This assessment will lead to decisions being made that display the cash flow statements showing negative cash flow which is an indicator of financial distress and in essence, this might be triggered by a huge variance between
cash expenses and receivables, high-interest payments and a drop in operational capital while Individual banks that undergo financial distress may find themselves in a state where their obligations are much more than their monthly revenue and include financial obligations such as payments, credit cards, and utility bills. In such a scenario, those firms who undergo conditions comparable to these tend to go through it for a prolonged period of time, and therefore banks must always use the best management strategies to succeed.

In a study done by Haile, (2012) in Ethiopia East Africa observed that “the financial systems have developed significantly over the last centuries and has become the largest in East Africa compared with other East African economies which shows that the Ethiopian financial institution sector is credited for its size and diversification. Ethiopia’s financial sector provides a variety of financial institutions and markets products unlike many others in the region”. According to Beck et al. (2018), “there have been limitations in the growth of the sector especially in the 1980s and 2012s due to factors like non-performing credits and weaknesses in companies’ governance leading to a number of financial institutions collapsing. Ethiopia’s financial sector continues to face challenges among them being financial distress therefore financial distress is one of the most significant threats for numerous corporations internationally despite their size and nature”. The term financial distress is “used in an adverse implication to define the financial condition of a company confronted with a temporary inadequate liquidity and with the complications that ensue in accomplishing fiscal commitments on schedule and to the full extent” (Outecheva, 2016).

According to Brownbridge (2014), a study carried out in Kenya showed that financial institutions are fiscally distressed when they are technically bankrupt and or illiquid and insolvency is the incapability of a business to have sufficient assets to cover its liabilities and the firm is required to take corrective action. The financial health of the finance industry is an important precondition for economic stability and growth in that the assessment of banks financial state is a fundamental goal for many stakeholders. The cost of bank failure is immense and hence ailing banks necessitate quick action by the supervisory authority to salvage from collapse (Cheserek, 2016).

1.1.2 Assets Restructuring

According to Salter & Weinhold (2018) “Asset restructuring is the reorganizing of a business' assets and liabilities which the process is often associated with corporate restructuring where an organization's overall structure and its processes are overhauled. Most businesses hold liabilities,
which are debts or other obligations that sprung up as a result of past transactions and these economic factors will often have the most significant impact on the success or failure of the business, so asset reorganization is likely to focus on effectively managing assets and reducing liabilities”. Asset restructuring involves “the infusion of investment to either finance leveraged buyouts or to buy back stocks from equity investors, or even to pay dividends. argued that changes in asset structure can be achieved by recapitalization, conversion of an asset into equity, and stock purchase”.

According to Hoskisson, et al., (2014) restructuring asset is “the process of reorganizing the legal, ownership and operational, or other structures of a company for the purpose of making it more gainful and better organized for its present requirement and also another alternative reason for restructuring is change of ownership or ownership structure, separation, a response to a crisis or major change in the business such as bankruptcy, repositioning or buyout”. A company that has been restructured well will theoretically be leaner, more efficient, better organized and focused on its core business with a revised strategic and financial plan. According to Hoskisson, et al.,(2014) “restructuring has been modified by managers in several industries so as to streamline cost, increase productivity and revenues, improve employees’ welfare, increase shareholders’ wealth, enhance efficiency and improve performance within the organization”. Adger (2012) recommend that “the banking industry has changed from primarily inactive, country centered, market-led organizations, government-run agencies to increasingly inexpensive, innovative and market-led organization’s”.

According to Bollinger & Smith (2014), who noted that “Depending on the nature of the organization’s businesses, structure, and size, organizations employ different asset restructuring approaches in order to achieve their desired level of output”, their view was supported by Claessens (2020), who noted that, “the organization must implement the right strategies that they have formulated if the anticipated performance level is to be achieved hence some of the strategies include non-performing assets, restructuring loans, asset-level management and written off assets among others”. Therefore, “those establishments that dynamically manage their trade portfolios through acquisitions and divestitures generate a substantively more shareholder value than those organizations kept in a fixed trade line up” (Heywood & Kenley, 2018).

According to Johnson & Whittington (2018) noted that, “restructuring an organization requires a restructurer who identifies and maximizes the reform opportunities in business which means
that they are able to classify the problem and its root causes, and are capable of formulating the best approach to counter the problem and any other issue arising out of the problems”. The theory of resource-based view “highlights that internal resources of the organization should be utilized effectively in formulating a strategy to achieve a practicable competitive advantage in the markets” (Barney, Wright & Ketchen, 2014). Deng (2018) also noted that “firms that possess and exploit resources and capabilities that are valuable and rare will attain a competitive advantage”.

However, Boxall (2014) argued that “if an organization is seen to have resources which can be restructured to provide it with competitive advantage then its perception does indeed become inside out, in other words, its internal competencies determine the strategic choice it makes in competing in its external environment”. In some circumstances, a firm’s resource may actually permit it to form new markets and value for the consumer. However, firms’ competencies involved a combination of organizational procedures, human skills, physical assets, routines, systems of information, and incentives that enhance performance along a particular dimension (Chandler, 2020).

According to Laeven & Valencia (2018), “developing countries and developed have had asset restructuring being extensively used therefore in most circumstances, asset restructuring is employed when a given structure becomes dysfunctional, corporations and economies restructure to achieve an advanced level of performance and also to survive”. Increasing competition and globalization beside the tightened monetary policies are causing banks to struggle for greater effectiveness and higher cost-efficiency. In many cases, the desired outcomes cannot be achieved without endangering the corporate structure and strategy to some transformation. In this framework, restructuring is no longer just an option but is a necessity for growth and survival (Schuler & Rogovsky, 2014).

According to Mulherin & Boone (2014) states that “in current eras, a sizeable number of countries have experienced financial distress of varying degrees of strictness and some have suffered frequent sessions of distress” while Imbo (2014) indicated that “the greatest cautionary signs of financial crises are proxies for the helplessness of the banking and corporate sector and that full-blown financial institution’s crises are associated more with exterior developments, whereas national variables are the main principle indicators of severe but contained banking
distress with the most noticeable indicators that can be used to forecast banking crunches are those that relate directly to the soundness of the banking system”.

According to Peter (2014) states that “restructuring, transformation, reengineering, reorientation, and renewal are words that define a change in how business is directed by this only the ready firms are able to apprehend constant changes the firms which approach actively to a process of restructuring and reengineering can be successful in the present domain”. Nazemroaya (2015) also noted that, “Asset restructuring involves the re-organization of assets, mergers, corporate restructuring, acquisitions, buyback, joint ventures and strategic alliances”. Therefore, asset restructuring involves effecting change in the capital structure to accomplish stable operational results.

According to Decker & Mellewigt (2014), asset restructuring is “identified by changes in the corporate's asset structure and the alterations include leveraged buyouts, investment for equity swaps and even some arrangement of recapitalization”. The principal returns in asset restructuring come from leveraged and management takeovers with improved emphasis on cash flows and changes in managerial incentives can be the intermediate effects of asset restructuring.

1.1.3 Assets Restructuring Strategies

1.1.3.1 Organizational Restructuring Strategy

Hayes (2002) describes, “the origins of organizational restructuring strategy in his concept of future shock and state that the change is a consequence of the existence of three related trends: transience, diversity and novelty and stated that organizational restructuring will normally change the levels of management in the company, affect the span of control or shift product boundaries”. Burnes (2004) stated that, “There is also a change in production procedures and compensation associated with this strategy and the reduction in the work force is the main by-product that accompanies organizational restructuring and is the reason for the least positive impact on organizational performance”.

According to Huskisson and Turk (2006) organizational restructuring augments the projections for enhanced performance for firms through organizational configuration, strategic reorientation and
governance structure modification. It offers prospect to transfer assets to higher treasured users hence recapturing competitive advantages that have been dissolute from over diversification and an additional focused strategy based on core business which is expected to yield higher profits.

Duhaime and Grant (2004) in their research also found out that higher achievements are created by divestitures under circumstances of a related strategy while Bowman et al., (1990) oppose that its effect on performance is contingent on the circumstances under which it is introduced but they add that generally, it leads to the smallest impact on financial performance. Additionally, Bowman et al., (1999) indicate that, “these intermediate effects could be an emphasis on cash flows and changes in managerial incentives and in the case of organizational restructuring, these effects could be in form of greater employee satisfaction, reduced turnover, increased efficiencies and better communication”.

According to Mintzberg and Quinn (1991), restructuring strategy, “encompasses frequently changing organizational management team, shifting strategy, or infusing the organization with new technology that the company may follow up on new acquisitions or business in order to build a critical mass, and selling off unneeded or unconnected parts and hereby reduce the effective acquisition cost”. Thompson and Strickland (2003) found out that, “Corporate restructuring has been a management approach used in financial management and organization management. Most companies have restructured their firms to improve their performance”.

Harwood, et al. (2016) in their research to examine the effect of organization restructuring on performance of national bank of Kenya based on the following objectives, “effects of organizational restructuring on firm performance, determine the relationship between organizational restructuring and financial performance”. The study found used 54 respondents as target population and on sampling the study used stratified and simple random sampling to collect data. The study found out that organization restructuring strategy positively affects the financial performance and recommended that the NBK should ensure that any of their departments should never be under staffed and unproductive staff should be retrenched.

1.1.3.2 Financial Restructuring Strategy
Osoro (2014) carried out a research on the study on “the effect of financial restructuring on the financial performance of commercial banks in Kenya which was conducted on 11 commercial banks in Kenya that was listed in the Nairobi securities exchange and were operational in Kenya between 2008 to 2013. The variables measurements of the study were debt ratio, equity ratio and dividend payout as measures of financial restructuring. The study found out that there exists positive effect of financial restructuring to financial performance of the banks”.

According to Kithinji et al. (2017) who conducted a study with aim to establish the relationship between bank restructuring and financial performance of commercial banks in Kenya which was based on a sample of 39 commercial banks between the period of 2002 to 2014. The study found out that, “commercial banks use all the four types of bank restructuring strategies like capital restructuring, operational restructuring, organizational restructuring and financial restructuring. Also the study found out that a direct association between bank restructuring and financial performance, capital restructuring and asset restructuring were the only variables found to have significant positive and negative influence respectively on the performance of commercial banks in Kenya. The study concluded that banks should focus more on capital restructuring and asset restructuring so as to influence profitability”.

1.1.3.3 Portfolio Restructuring Strategy

Muiruri (2015) conducted a study to establish the impact of strategic partnerships on performance of commercial banks with equity bank as a case study. The research adopted descriptive research design, primary data collection was used with interview guide being administered to managers and partner organizations. The study found out that, “strategic partnerships between equity bank and its partner organizations improve staff capacity and thus enables it to be equipped in handling the challenges they experienced and therefore improving on its service delivery. It was found out that partnerships enhance new customer acquisition through the creation of portfolio funds where customers can take loans and pay back, the study concluded that strategic partnerships have benefits in major ways that this concept should be employed by organizations in order to survive and sustain their operations in the competitive environment”.

Rainy et al (2012) conducted a study, “to examine the effect of restructuring on an organizations performance specifically inquiring the frequency with which an organization carries out
portfolio, financial and organizations restructuring. The research was conducted with the sample of four mobile phone operators in Kenya and adopted a casual research using questionnaires to collect data from the human resources finance, ICT and marketing departments of the four major mobile phone service providers. Descriptive statistics was used to analyze data and the study found out that firm’s decision to restructure is influenced by a change in the firm’s objectives, legal/ political, socio cultural, technological factors and the results concluded that all companies conducted restructuring with portfolio restructuring being undertaken more often as compared to other types of restructuring”.

1.1.4 Financial Performance
According to Niresh (2012) states that profit is that summation of which is left of the revenue a corporate generates after it pays all expenses directly related to revenue generation such as production and operational expenses and it is critical for the survival of the business through indication of parameters like actual performance like targets against plans and other key performance indicators established by the institution. In addition, the author emphasized that the major assets of the banks are in advances and loan to corporates, individuals or business while banks liabilities include the customer deposits or other finances obtained from external institutions which must be paid back hence key obligations.

According to Gharaibeh (2015), the factors determining the profitability of banks fall into two main groups which include, “the first category is one that is unique to each bank and more often than not is as a direct result of managerial decisions these are asset structure, asset quality, capitalization, financial structure, efficiency, size, and revenue diversification while the second category relates to the industrial structure and to the macroeconomic environment within which the banking system operates, such as industry concentration, economic growth, inflation, and interest rates. To determine the profitability of a firm, profitability ratios are normally used to measure earnings generated by a firm for a certain period of time and these ratios are based on the firm’s sales level, capital employed, assets and earnings per share (EPS)”.

According to CBK report (2018), states that, “the overall industry performance for 2017 has improved from that in 2016 with total assets and customer deposits increasing by 9% (2016: 1.6%) and 11.5% (2016: 1.5%) respectively while Operating Income decreased by 2.5% in 2017
(10.8% up in 2016), PBT also decreased by 7.7% (10.9% up in 2016). Investments in Government Securities increased by 17% in 2017 (24% up in 2016) from KSh 857bn in 2016 to KSh 1tn in 2017”. This may be attributed to the banks’ reducing their lending to retail and corporate customers in favour of what they deem to be a safer investment in government securities while the Industry Losses on Loans & Advances decreased by 7.1% which is a significant improvement from the increase of 22.7% registered in 2016. This positive trend can be seen in the industry’s Loan Loss Provisions which increased by 26.3% in 2017, compared to the 40.9% in 2016, and the gross NPL have increased to Kshs 265bn in 2017 from Kshs 218bn in 2016, representing a 21.8% rise which is lower than the 31.6% recorded in 2016.

Financial distress is a state when a corporation is struggling to generate adequate returns to meet its fiscal obligations (Wikipedia, 2020), there could be numerous explanations for such a situation as stated by Henrik (2019) that “most common ones are high fixed costs, illiquid assets, and unfavorable macro trends. Some of the signs of a corporation facing financial distress are unable to pay creditors, third parties, unable to pay monthly bills and salaries”. When a company is in such a condition, it not only upsets the top management but the lower employees may also suffer from reduced morale and trauma due to the company not being able to meet their obligations.

A study carried out in Canada by Owen (2015) noted that in which he was addressing determinants of financial dress among banks in North America, he concluded that most bank failures result from failures to get financial support to rescue it from failure. An elaborate of the definition of bank failure is provided by Hambrick and D’Aveni (2004) which according to the authors, “a bank is deemed to have ‘failed’ if it is liquidated, merged with a healthy bank (or purchased and acquired) under central government supervision/pressure, or rescued with state financial support”. Additionally, Purnanandam (2014) defines “financial distress as a low cash-flow state of the firm in which it incurs deadweight losses without being insolvent.” The author assumes being financially distressed as the firm’s state of facing a financial condition whereby it finds itself in an intermediate state between solvency and insolvency due to low cash flow. According to Asquith, Grtner & Shefstein (2014) stated that “choose the interest coverage ratio in order to define financial distress which they classifies a corporation as distressed if in any of two successive years its EBITDA is lesser than 80% of the corporation’s interest expense and
this marker incorporates the fact that a company facing financial distress usually experiences a deterioration in profitability, be overleveraged or face insufficient cash flows to cover current obligations”.

Carpeto, et al., (2010) evaluated the financial distress of banks by using the nonperforming loan to total loan ratio to and therefore from previous researches mentioned that “there is no single unanimously accepted definition and measure of financial distress that can be applied to banks”. He identified the “simplest, reliable, accurate and reliable distress classification instrument that can be used based on accounting measures of the financial safety of banks and the results of his study show that the most tolerable and reliable measures of distress are the ones based on non-performing loans to total loans”. He argues that this is because “banks’ assets are longer-term and less liquid than their liabilities and the interest income that they earn through lending is principle source of operating income for them”.

A study carried out in Algeria by Mohammed (2017) stated that “most banks in North Africa aren’t doing well financially and is on the brink of collapse and the conventional accounting pointers of distress like as the interest coverage ratio cannot be realistic to examine the financial soundness of banks”. Among the scholars who defined financial distress from the perspective of financial institution particularly banks, Chang-e (2016) defined “as the condition of being in severe difficulties over money, especially being close to bankruptcy also emphasize that the complications come in whenever the banks cannot meet or have trouble paying off its financial commitments to its creditors”. Classical scholars who did the first studies about financial distress and bankruptcy predictions, in particular, are Smith and Winakor (2015) as cited by (Skogsvik and Skogsvik 2013), (E. Altman, 2018). They were followed by (Merwin, 2012) as cited by (Andualem, 2011) and all in their studies pointed out that deteriorating firms show significantly different ratios than successful firms do. According Bever (2016) indicated that “on ratio analysis and bankruptcy prediction models was” hence his research is considered as one of the classical works on this subject and also examined the use of multivariate analysis but believed in the use of univariate analysis of financial analysis to forecast corporate bankruptcy.

E. Altman (2018) is one of the classical researchers of financial distress and bankruptcy. He had been continuously conducting researches in the area of distress and distress classification model,
and to develop an improved model for bankruptcy prediction. He first developed a Z score model which is widely accepted distress classification model and had been in use since its development in 2018. In 2017 being accompanied by Haldeman and Narayanan, he developed a new revised Z score model which he calls the ZETA model, and in 2013 he also set up a different model in forecasting financial distress of companies by reexamining the ZETA model. The prediction model used “selective function by linear regression model where Z is the overall index and other fiscal variables to be independent variables such as working capital to total assets, retain earnings to total assets, earnings before interest and tax to total assets, book value equity to book value of total liabilities and sales to total assets”. The empirical findings of distress and non-distress companies’ Z-Score were very accurate to predict failure model and useful to suggest the causes of financial distress and again in 2002, he revisited this model for testing of accuracy of the model given the fact that it has been a long time since it was first developed and the dynamics of economic and other factors have been changing for these all years. Accordingly, he improved the model to be wide enough to embrace non-manufacturing sectors such as financial institutions. The new model is developed to serve for service giving organizations including financial institutions. The detail about this model is discussed in the methodology part under the model specification. According to Almeida and Philippon (2010) who analyzed the risk-adjusted cost of financial distress reaffirms that “studies have been conducted on public companies in the United States which have allotted corporate bonds and got hitches to pay debt”.

1.1.5 Tier Three Commercial Banks in Kenya

According to CBK (2018), The Central Bank of Kenya (CBK) classifies commercial banks in Kenya into three tiers with the classification being based on market share, asset base, amount of capital, and the number of customer deposits and stated that “Tier 1 consists of large banks which have billions of shillings in assets, capital, and customer deposits. In Kenya, there are currently 6 banks classified as tier 1. These six banks control approximately 65.4% of the commercial bank market, 66.7% of total deposits, 90.3% deposit accounts, and 94.10 of loan accounts. The second tier consists of eleven commercial banks which control 26% of the commercial banking market, 0.25% total deposits, 7.6% of deposit accounts, and 3.8% of total loan accounts. Tier three commercial banks consist of twenty-three banks which control 8.9% of the commercial bank market share, 8.2% of total deposits, 1.8% of deposit accounts, and 1.8% of loan accounts”.

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According to CBK report (2019) stated that, “over the last few years, the banking sector has shown robust growth. However, when analyzed by tier classification, it was established that the pre-tax profits of tier three commercial banks decreased by 2.2% during the period 2015 to 2016. This decline was attributed to five commercial banks in this category posting losses. First community bank realized a loss of Kshs. 41.0 million, Jamii Bora Bank realized a loss of Ksh.490.0 million, and Consolidated Bank realized a loss of Kshs. 277.0 million. While Dubai Bank and Imperial Bank were placed under receivership for their failure maintains adequate capital and liquidity ratios, large non-performing loans and weak corporate governance structures”. In the same period the report stated that “Tier 3 banks have the highest cost of funding, it is evident that economies of scale have played in favour of large banks when it comes to funding costs. The large banks have embraced the agency banking model to augment their wide branch network in mobilizing deposits. This in addition to the earlier alluded non-deposit funding avenue in the form of specialized lines of credit and access to capital markets that are not readily accessed by smaller bankers”.

1.2 Statement of the problem

According to CBK report (2019) stated that “while the growth in deposits is trending towards the pre-2013 pick level, the most notable development is the rebound in deposits’ growth in Tier 3 banks and following the 2015 – 2016 market turbulence associated the failure of three commercial banks, the liquid stress that displayed in the flight of deposits saw its rate of growth amongst Tier 3 banks shrink by 2.1 percent. The share of Tier 3 banks to total deposits remain small and therefore not likely to substantially influence the overall deposits growth. Nonetheless, the fact that they registered a 33 percent deposits growth in 2018 compared to 9 percent in 2017 is a commentary that market confidence is continuously being entrenched in this market segment. Additionally, on the financial performance of the tier 3 banks, it is noted that the income trend has been declining from 16% in 2014 to -9.9% in 2017 to 11% in 2018”.

Financial distress has been a great problem all over the world and cannot be ignored since from the above empirical studies it is found to lead to bankruptcy which eventually leads to bank failures. Kenya is not an exception and many banks have collapsed due to financial distress which indicated that nine local banks and twenty NBFIs were closed down or taken over between 1984 and 1996 in Kenya. Due to the huge number of banks that collapsed within that short period, the CBK lost a total of Kenyan Shillings 10.2 billion which was equivalent to 3.8
per cent of 1993 GDP due to bank failures (Brownbridge, 1998). Kithinji & Waweru (2017) pointed out that, “Despite the impressive growth, dynamism, sophistication and depth, the banking sector in Kenya has faced numerous challenges. The most significant challenge facing this sector is financial distress. Even though a decline in the number of bank collapses in the recent past, the banking sector still faces challenges mostly associated with financial distress”. During the period 2015 - 2016 three commercial banks faced assets restructuring amongst them was Dubai bank in August 2015, Imperial bank in October 2015 and Chase bank in April 2016 and two of the three commercial banks were listed in tier three category. This indicates that perhaps this category of banks is susceptible to assets restructuring.

Various researchers above have analyzed the effect of assets restructuring on the financial performance of firms and commercial banks. However, this research study looked to fill the previous studies gaps by only focusing on the variables that cause assets restructuring amongst commercial banks in Kenya with broader sampled years which include 2010 to 2019 considered compared to previous studies hence the study looked to fill the conceptual and contextual gap of effect of asset restructuring on tier three commercial banks in Kenya and more so considering the period of global financial crisis.

1.3 Objectives of the study
1.3.1 General Objective
The overall objective of this study was to determine the effect of asset restructuring on financial performance of tier three commercial banks in Kenya.

1.3.2 Specific Objectives
The specific objectives of this study are:

   a) To examine the influence of restructured loans on the financial performance of tier three commercial banks in Kenya.
   b) To investigate the influence of non-performing assets on the financial performance of tier three commercial banks in Kenya.
   c) To examine the influence of assets level management on the financial performance of tier three commercial banks in Kenya.
   d) To investigate the influence of written-off assets on the financial performance of tier three commercial banks in Kenya.
1.4 Research Questions

The researcher seeks to test the following research questions;

a. In which ways do restructured loans affect the financial performance of tier three commercial banks in Kenya?

b. How do non-performing assets impact the financial performance of tier three commercial banks in Kenya?

c. Does the process of assets level management affect the financial performance of tier three commercial banks in Kenya?

d. What are the implications of written-off assets on the financial performance of tier three commercial banks in Kenya?

1.5 Significance of the Study

The findings of this research will contribute to additional knowledge on asset restructuring in Kenya. This will help banks and future researchers to have better knowledge on assets restructuring hence facilitate in the formulation of focus intervention strategies and coordinate efforts aims at improving profitability, mitigation of challenges and growth in tier three commercial banks. The profitability and growth of the bank will help solve national problems like inflation and unstable financial markets. This study will be beneficial to the following groups:

i. Government

The government will use the conclusion and recommendations of this research in formulating and restructuring policies that affects tier three commercial banks assets restructuring hence facilitate the sustainable growth and development of the nation and the role that banks play in achieving Vision 2030.

ii. Banking industry

The banking industry will use the recommendations and conclusions of this study to comprehend intensely the consequences of asset restructuring on banks profitability to necessitate their continued positive growth and business survival.

iii. Investors
The investors will develop better understanding of the effect of asset restructuring on the profitability of financially distressed banks and the extent to which the identified effect affects banks’ productivity hence be informed and can make better decisions considering this study recommendation.

iv. Future researchers and scholars

The scholars and researchers who are having interest in the assets restructuring and financial performance of tier three banks will use the research limitations, summary and recommendations to enable them have a historical information and better conceptualize on future research in this field.

1.6 Scope of the Study

The study focused on tier three commercial banks given that most of the banks experiencing assets restructuring in Kenya have been in this category. The study was guided by specific objectives which is to establish the manner in which distress factors such as restructured loans, non-performing assets, assets level management and written-off assets has effects on of tier three commercial banks. The study was conducted in a span of the period 2010-2019.

1.7 Limitations and Delimitation of the Study

The study was limited to the effect assets restructuring has on the profitability of the selected Tier Three commercial banks in Kenya and therefore the findings, analysis and recommendations may not be linked to the whole banking industry in Kenya. Perhaps research into other banks may yield dissimilar outcome. Additionally, the results of this study largely depend on secondary information analyses. Therefore, the study results are subjected to the limitations of the bank’s financial statements as reported to the general public which were under custody of CBK Supervision Department. The data available was only for the period year 2010 to 2008 therefore the researcher had to go to individual banks websites to obtain audited accounts. The study had limitation of not having access to data as targeted and hence the unbalanced panel data was obtained.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will provide a general review of literature that is based on the theories of asset restructuring and how it affects the profitability of financially distressed banks in Kenya. This chapter will entail a theoretical review of previous studies on the effect of asset restructuring on the profitability of financially distressed banks, empirical review, and research gaps, and lastly is a conceptual framework for the study.

2.2 Theoretical Framework

2.2.1 Free Cash Flow Theory of Cash Management

Free cash flow theory was given meaning as the non-capital expenditure net flow, payment of dividends and the cost of invention by Jensen in 1986, in the hypothesis generated by Jensen (1986), it was stated in the proposal that unnecessary investments could be prompted by the management in the case there are too much cash flow under their control and it was further implied in the hypothesis that much of free cash flow would results to administrative waste of cash.

According to Ricks (2020) emphasized that “the free cash flow of cash management is concerned with the management of cash flows into and out of the firm which is cash flows inside the firm and cash balances held by the firm at a point of time by financing deficit or investment surplus cash”. Also noted that “Short-term administration of corporate cash balances is a major concern of every firm which is so because it is difficult to foresee cash flows precisely, particularly the inflows and there is no faultless coincidence between cash outflows and inflows. During
particular periods, cash outflows will exceed cash inflows because expenditures for taxes, dividends, or seasonal inventory will build up” (Rutledge & Raynes, 2019).

However, in other instances, “cash inflows will be more than cash sales and debtors may realize in large amounts promptly” (Gandolfi & Hansson, 2011). “An imbalance between the cash inflows and outflows would mean failure of cash management function of the firm and persistence of such an imbalance may cause financial distress to the firm and hence business failure” (Mungai, 2014).

Therefore, the theory supports to conceptualize the key bases of financial distress in the banking sector since it explains the causal effect relationship between free cash flow and financial distress in the institutions.

**2.2.2. Credit Risk Modeling Theory**

Altman and Saunders (1998) presented a classical overview on credit risk which they summarized the key developments on credit risk modeling over its past 20 years, and the authors pointed out that “Credit risk measurement has evolved dramatically” since this topic arose and this statement is still valid today. There are increasing interests from a diverse group of disciplines, from traditional finance and mathematical statistics to econometrics. Therefore, given that no other overview has been published since Altman and Saunders’s (1998) work then the authors are considered to be key proponents of this theory.

According to Downes & Goodman (2019) noted that “credit refers to the endowment of goods and services to a person or entity on established terms and conditions where the disbursements are to be made later with or without interest and during the contract period, not all borrowers will repay their dues as and when they fall due”. Also noted that “When a borrower does not pay their dues on the payable date, a moneylender is exposed to credit risks which may, in turn, lead to default hence credit risk is therefore the investor’s risk of loss, financial or otherwise, arising from a debtor who does not pay his or her dues as arranged in a contractual terms” (Gu & Subramanian, 2012).

**2.2.3. Gambler's Ruin Theory**

According to Eckbo (2018) stated: “gambler ruin theory was developed by Feller in 1968 who based it on the prospect theory where a gambler wins or loses money by chance and the gambler
starts with an arbitrary, a positive, amount of money where the gambler wins a dollar with probability \( p \) and loses a dollar with a probability \((1-p)\) in each period whereas the game continues until the gambler runs out of money”. This theory is applied with the corporation being assumed of like a gambler playing repeatedly with some probability of loss, continuing to function until its net worth goes to zero meaning the firm is bankrupt. With a presumed initial amount of cash, in any given period, there is a net positive that a firm’s cash flows will be consistently negative over a run of periods, ultimately leading to bankruptcy (Kemboi, 2013).

Eckbo (2018) emphasized that “the main flaw of this theory is that it assumes that a firm starts with a certain amount of cash hence there two main hitches with this theory when predicting bankruptcy is that the company has no access to securities markets and the cash flows are results of independent trials and managerial action cannot affect the results. The gambler ruin theory leads to an understanding of the causes of fiscal distress by the commercial banks and how asset restructuring affects profitability”.

2.3 Concepts of Asset Restructuring and Financial Performance of Banks

Hoskisson et al., (2014) defined restructuring as “the act of rescheduling the ownership, legal, operational or other structures of a company for the drive of making it more cost-effective and better structured for its current needs”. The author also notes that “other reasons for restructuring include a change of ownership structure or ownership, demerger, a response to a crisis or major change in the business such as repositioning, bankruptcy or buyout”.

Hoskisson, et al., (2014) noted that “a corporation that has been restructured well will hypothetically be leaner, better organized, more efficient and focused on its core business with a reviewed strategic and financial plan”. Restructuring has been adapted by administrators in several firms to increase productivity, increase shareholders’ wealth, streamline cost and revenues, improve employees’ welfare, enhance efficiency and improve performance. Adger (2012) suggested that “the banking industry has transformed from predominantly country centered dormant, government-run agencies to increasingly innovative, competitive and market-led administrations”.

According to Oloyede et al., (2013) states that “asset restructuring refers to diverse activities such as divestiture of under-performing business, spin-offs, acquisitions, stock repurchases and debt swaps, which are all one-time transaction, but also structural changes introduced in day to
day management of the business. It is perceived that restructuring is concerned with changing structures in pursuit of short and long term gains”.

2.3.1. Restructured Loans

According to Mason & Asher (2019) stated that “throwing lifelines to defaulting companies, banks are giving new loans to enable them to pay interest on old loans and altering working capital outstanding into term loans with such arrangements better known as ever-greening of sticky loans and are being struck by almost all corporations who are taking refuge in the Central Bank of Kenya new norms that allow restructuring of loans”. According to Vauthey, et al., (2012) outlined that “bankers have a name for such activities as deep restructuring and close to a few thousand of loans are at various stages of such deep restructuring which on the bright side, disbursing new money would keep afloat several corporations and help banks hide bad loans”. Nevertheless, the move could backfire on lenders if borrowers continue to find their fortunes declining (White, 2019).

Augustin et. al., (2014) stated that “while restructuring an account, a bank gives a debtor longer time to reimburse the loan and, in certain cases, a debtor is given a special dispensation on payment of monthly installments for a fixed period moratorium period”. However, during this moratorium duration, the debtor does not require to make any payment for the principal and interest component of the loan. Under the deep restructuring, debtors are given a loan for making payment of interest component, and such loans are known as funded interest term loans. According to Schmenner (1986) noted that “this loan is prearranged only to those companies who may not be in a position to service even the interest component and banks involved in extended funded interest term loans fear that if the corporate defaults post-restructuring which Central Bank of Kenya is unlikely to issue a similar scheme on restructuring soon”. A default will increase the ratio of bad loans and force banks to make higher provisions, which means lower profitability, (Stiglitz & Weiss, 1981).

According to Taylor (2018) notes that “few bankers at the same time do not contemplate there is anything unusual about funded interest term loans and the only difference is that banks are more active in giving such loans now as compared to anytime in the past”. The Central Bank of Kenya regulation states that “banks have to make full provisions for funded interest term loans, which goes to specify that they are aware of such practices in the banking system” (Wadaki, 2013).
However, to forestall provisions on funded interest term loans some banks are carving out working capital loans into term loans. Berger & Udell (2017) notes that “a debtor drawing limits on working capital loans are associated to receivables and inventories, and in the case of term loans the lending need not be supported by inventories which help even the debtors with poor inventory position to tap bank funds for the shorter term hence this study, therefore, seeks to examine the effect of restructured loans on the profitability of financially distressed commercial banks in Kenya”.

2.3.2 Assets level management

According to Bowman & Singh (2017) states that “assets level management involves reorganizing the firm into a self-contained strategic business unit, acquiring companies that relate to and strengthen the core, divestment of lines of businesses not fitting the core business, discounting unpromising products and forming strategic associations, joint ventures and licensing agreements”. Besides, two firms can merge to form a single unit and there are several motives why firms merge but the most principal objective is to increase the value of the combined enterprise (Dunning & Lundan, 2018). Such amalgamation causes synergy to exist from four sources which include operating economies, which result from economies of scale in management, production and marketing, distribution, financial economies including lower transaction costs, differential management efficiency, and increased market power due to reduced competition (DeVillar & Faltis, 2017).

Höfer et al., (2013) stated that “asset level covers asset divestment and asset investment and where a financial institution is in severe distress and where strategic wellbeing is weak, asset reduction is deemed imperative for a turnaround”. Divestment of subsidiaries is perhaps the most common turnaround strategy by all but the smallest companies (Filatotchev & Toms, 2017). The objective of asset divestment is to do away with non-profit generating assets or even profitable assets for the need to sell off none core assets or raise cash to lighten financial distress and debt restructuring. In their sample of Japanese firms, Murithi (2019) found that “asset reduction contributes to substantial improvement in operating income” while according to Al-Muhawesh & Qamber (2018) states that “asset investment covers business and corporate level investments and comprises both internal capital expenditure and acquisitions. Also, the firms with low financial performance but not yet in severe distress often result in acquisitions to accelerate growth”. Acquisitions may thus contribute to a successful sharp bend and sustained good performance
thereafter but need to be selected and managed carefully (Collett et al., 2014). This study therefore will examine the effect of asset level on the profitability of financially distressed commercial banks in Kenya.

2.3.3 Non-Performing Assets
According to Balasubramaniam (2012) states “that non-performing assets refers to the investment of money in bad assets, which occurred due to wrong choice of client and project and because of the money getting blocked the prodigality of bank decreases not only by the amount of non-performing assets but it leads to opportunity cost as much of the profit capitalized in some return earning asset hence, non-performing assets does not only affect current profit but also future profits, which leads to losing some long-term beneficial opportunity”. Also emphasized by Joshi & Joshi (2018) that “the profit of the banks also reduced due to write off provision for non-performing assets”.

Gopalakrishnan, (2014) emphasized that “Non-performing assets cease the income from both interest and principal, which eventually blocked the cash inflows from the investments, and it is therefore difficult in the part of the banks to mobilize resource effectively and the new investments cannot possibly be done due to lack of funds to finance it”. McKinnon (2019) emphasize that “fund getting blocked, decreased profit leads to lack of enough cash at hand which lead to lending money for the shortest period time which ultimately leads to additional costs to the bank. Various difficulties arise in operating the functions of banks are another cause of non-performing asset due to lack of funds hence non-performing asset directly affects the liquidity of the financial institution and banks”.

Andreff (2015) stated that “The non-performing asset has critically affected the sanction for the new project as the corporation do not have sufficient fund to invest in new project due to slowdown of inflow of funds because of non-performing assets hence faces difficulty in sanction and disbursement.” The operational cost of the firm is increased due to an increase on the non-performing assets hence increase the monitoring cost with both the preventive and curative measures for reducing non-performing assets attracts high expenses. The non-performing asset in one hand ceases to generate any income from interest and on other hand, it creates loss through effective management. The non-performing assets also affect the goodwill of the organization, and the main cause of the non-performing asset is “lack of efficiency in management” (Wadaki,
2013). Nevertheless, goodwill of the organization is adversely affected by it which, therefore, this study seeks to investigate the effect of non-performing assets on the profitability of financially commercial banks in Kenya.

### 2.3.4 Written Off Assets

According to Reichheld & Teal (2012) in business accounting, the term write-off asset to refer “to an investment for which a return on the investment is now impossible or unlikely which the item's potential return is thus canceled and removed from the business's balance sheet. Common write-offs in retail include spoiled and damaged goods”. In commercial or industrial settings, “a productive asset may be subject to write-off if it suffers failure or accident damage that is infeasible to repair, leaving the asset unusable for its intended purpose” (Glaister, 2014). Similarly, Turnell (2012) argued that “banks write off bad debt that is declared non-collectible such as a loan on a defunct business, or a credit card due that is in default, removing it from their balance sheets”. However, Moyer et al., (2017) posit that “a reduction in the value of an asset or earnings by the amount of an expense or loss. Companies can write off certain expenses that are required to run the business, or have been incurred in the operation of the business and detract from retained revenues”.

### 2.4 Determinants of Financial performance of Banks

Profit is the ultimate goal of all commercial banks hence all the strategies design and activities perform thereof are meant to realize this grand objective (Kilimo & Finance, 2012). To measure the profitability of commercial banks, there are varieties of ratios used of which return on asset and return on equity are the major ones (Maina & Muturi, 2013).

Digal & Kanungo (2015) studied the “profitability of Palestinian commercial banks listed on Palestine securities exchange measured profitability using three indicators; return on assets and return on equity. The study employed the correlation and multiple regression analysis of annual time series data from 2017- 2019 to capture the impact of bank size, credit risk, operational efficiency and asset management on profitability measured by the two indicators, and to create a good-fit regression model to predict the future financial performance of these banks. The study rejected the hypothesis claiming that there existed a statistically insignificant impact of bank size, credit risk, operational efficiency, and asset management on financial performance of
Palestinian commercial banks”. Hence, for this study, return on asset and return on equity will be used to measure the financial performance of tier 3 banks in Kenya.

2.4.1 Return on Equity
Ronoh (2015) stated that “Return on Equity (ROE) is a financial ratio that refers to how much profit a firm earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation”. It is further explained by Abdullah, et al., (2014) that ROE is “the ratio of net income after taxes divided by total equity capital. It represents the rate of return earned on the funds invested in the bank by its stockholders (Brealey et al., 2012). ROE reflects how effectively bank management is using shareholders’ funds”. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders’ capital.

2.4.2 Return on Assets
Sankaraiah et al., (2014) stated that “Return on assets is also another major ratio that indicates the profitability of a bank. “It is a ratio of Income to its total asset hence It measures the ability of the bank management to generate income by utilizing company assets at their disposal”. In other words, it shows how efficiently the resources of the company are used to generate income. It further indicates the efficiency of the management of a company in generating a net income from all the resources of the institution. Chiu & Wong (2014) stated that “a higher return on asset shows that the company is more efficient in using its resources”.

2.4.3 Return on Average Capital Employed
According to Hai-Ming & Ku-Jun (2014) return on average capital employed (ROACE) is “a financial ratio that shows the profitability versus the investments a company has made in itself and this metric differs from the return on capital employed (ROCE) calculation, in that it takes the average of the opening and closing capital for a while, as opposed to only the capital figure at the end of the period”. Return on average capital employed is a useful ratio when analyzing businesses in capital-intensive industries, such banks (Moore & Reichert, 1983). Businesses can
squeeze higher profits from a smaller amount of capital assets will have a higher ROACE than businesses that are not as efficient in converting capital into profit (Kaplan & Norton, 2017).

Hart (1973) noted that “the return on capital employed ratio shows how much profit each shilling of employed capital generates” obviously, a higher ratio would be more favorable because it means that more shillings of profits are generated by each shilling of capital employed and investors are interested in the ratio to see how efficiently a company uses its capital employed as well as its long-term financing strategies (Modigliani & Miller, 1958). Companies' returns should always be high than the rate at which they are lending to fund the assets which if companies borrow at 10 percent and can only achieve a return of 5 percent, they are losing money.

2.5 Empirical Review
Cascio (2012) noted that “The common benefits of asset restructuring frequently cited in studies include improved accuracy, and the provision of timely and quick access to information, the saving of costs and although it may be possible to identify many of the relevant organizational restructuring costs, it is more difficult to quantify the intangible benefits to be derived from the re-structured organization which beyond cost reductions and productivity improvements, restructuring potentially and fundamentally affects revenue channels”.

Sun & Chang (2011) while investigating the effect of asset restructuring on the operating efficiency of commercial banks in Taiwan concluded “that that banks had lower operating efficiency on average during the reform period (2012-2014) compared to the pre-reform period (2012-2012), improved operating efficiency was reflected in the post-reform period (2014). Their results remain unchanged even after controlling for the non-performing loan ratio, capital adequacy ratio, bank ownership, and size” hence the results indicated that the enhanced efficiency in the post-reform period was possibly due to the reduction of nonperforming loans rather than the boosting of capital adequacy in the reform period.

Nkegbe & Ustarz (2015) in their study of the determinants of the financial performance of commercial banks in Kenya conclude that “bank-specific factors significantly affect the performance of commercial banks in Kenya, except for liquidity variable. But the overall effect of macroeconomic variables was inconclusive at 5% significance level. The moderating role of
ownership identity on the financial performance of commercial banks was insignificant and that the financial performance of commercial banks in Kenya is driven mainly by board and management decisions, while macroeconomic factors have insignificant contributions”.

Karanja (2015) while researching on “the effects of asset restructuring on organization performance of mobile phone service providers in Kenya specifically noted that inquiring the frequency with which an organization carries out an asset, portfolio, financial and organization restructuring, concluded that the four methods of restructuring have a favorable effect on the companies’ market share and market growth. Their results indicate that asset restructuring had the greatest impact on a company’s market share followed by financial restructuring, portfolio restructuring, and organization restructuring. It is distinct that organizational restructuring had the greatest impact on market growth rate hence the findings further indicated that a firm’s decision to restructure is influenced by a change in the firm’s objectives, political/legal, technological, economic and socio-cultural factors; with greater weight being set on the firm’s objectives, technological change and economic factors”.

Ithiri (2014) in his study of corporate restructuring and its effects on Kenya commercial bank’s performance found that “the main drivers for restructuring were competition, new company strategy, budgetary cuts, public pressure and change in government policy which the study revealed that increase in competition in the industry, government policy, increase in customer demands forced the firm to restructure itself to remain competitive in the market and also revealed that the organization structure had changed two times which was a result of competition in the market, regulation by the government, changes in the company’s policies”.

Mbogo & Waweru (2014) in their study on the corporate turnaround response by financially distressed companies listed on the NSE which “surveyed companies that were listed for the entire period of the study (2012-2018) and the survey found out that employee layoff was the most preferred course of action being carried out by 63% by the companies, asset restructuring was the second most ideal turnaround strategy being carried out by 50% of the companies. Debt restructuring and top management change were the least preferred turn around strategies each one of them being taken by one company each”.

Srivastava & Mushtaq (2011) on his study on the influence of asset restructuring on operational features of the publicly traded firms in China showed that “changes in revenue, profit margin, return on assets and the total asset turnover ratio before and after the restructuring as proxies for
firm performance and conducted tests to determine whether restructuring resulted in significant changes”. Their study found that “there were significant improvements in total revenue, profit margin, and return on assets following restructurings but there was no evidence of any significant impact on asset turnover ratio and also found evidence of significant market anticipation and over-reaction to the restructuring announcements”.

According to Jarso (2013) in his research noted that “improvements in the corporate performance of corporates involved in merger and acquisition. Using a sample of Egyptian companies in the period from 2017 to 2013 in the construction and technology sectors, their results showed that merger and acquisition in the construction sector have contributed in improving the profitability of firms while in the technology sector, no improvements were discovered which for both sectors, merger & acquisition did not improve efficiency, liquidity, solvency, and cash flow positions”. However, research which was done by Kim et al., (2014) states that “on the implications of asset restructuring on financial performance in Chinese context assert that performance improvement is realized upon organizational restructuring”. This is supported by inconclusive evidence from Yang et al., (2012, October) study which showed “asset restructuring results in better profitability”.

Lockett et al., (2018) in his comparative studies found contradictory results that “positive change in performance for firms that adopted portfolio and financial restructuring and negative results for firms that adopted organization restructuring”. Ngige (2012) studied the “consequence of asset restructuring on the profitability and long-term competitiveness within the Kenyan banking sector and on the significance of different modes of asset restructuring adopted by the banks in influencing profitability”. He found out that “asset restructuring resulted in improvement in profitability in terms of market share growth, competitiveness, growth in quality of products, geographical spread, and customer retention. Additionally, found out that banks used different strategies of asset restructuring which had different motives in influencing profitability and in the case of asset restructuring, the study showed an increase in the year of restructuring and the year after though it was at a greater magnitude in the asset mode of restructuring”.

Odula (2015) researched on “the corporate turnaround response by financially distressed companies listed on the NSE which the surveyed companies that were listed for the entire period of the study (2012-2018). The survey found that employee layoff was the most preferred course of action being carried out by 63% by the companies, asset restructuring was the second most
preferred turnaround strategy being carried out by 50% of the companies and financial restructuring and top management change were the least preferred turn around strategies each one of them being taken by one company each”.

The study by Riany et al., (2012) stated that “on the effects of restructuring on organization performance of mobile phone service providers in Kenya concluded that the three methods of restructuring have a favorable effect on the companies’ market share and market growth. Their results indicate that asset restructuring had the greatest impact on a company’s market share followed by financial restructuring, portfolio restructuring and organization restructuring. It is distinct that asset restructuring had the greatest impact on market growth rate”.

2.6 Research gap
Asset restructuring is key in any corporate financial performance especially in times of financial distress and the Kenyan banks are subsequently not an exception when in times of such financial crisis. The banks need to reexamine their capital structure and review it with an interest to ensure it is at its optimal level and with target of achieving the optimum capital structure, financial restructuring may mean the bank issues new debt or equity and may also call for the total opposite in which the corporate institution buys back its shares from the security markets or avoids debt in total or may lead to downsizing of staff in a bid to decrease the cost to income ratios of the financial institutions in bid to increase bottom line that is profitability hence it may also mean strategic partnerships with other financial institutions in the form of mergers or acquisitions to place themselves in strategic positions in times of competition and growth. Some institutions have had to restructure their product offering to get the most earnings as they can.

Vidzbelytė et al., (2013) pointed out that “the overall effect of macroeconomic variables on the performance of financial institutions after restructuring was inconclusive and macroeconomic policies are long term and as such measuring their effects in the short term may be difficult. Similarly, it is difficult to adequately measure the relationship of macroeconomic factors, restructuring, and firm performance”.

Ithiri (2014) found that one of the main drivers of asset restructuring was a new company strategy and noted that “The question will be how many times does a company change its strategy and does this mean that frequency of restructuring is pegged on the frequency of change in strategy as well” hence the research gaps intended to be filled in this study will be establishing
whether macroeconomic factors affect the profitability of a firm on restructuring, whether the size of the firm has an impact on restructuring and performance and the level at which restructuring affects efficiency and performance.
2.7 Conceptual Framework.
According to Mugenda & Mugenda (2016), “a conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationships between variables in the study and shows the relationship graphically or diagrammatically and the drive of a conceptual framework is to help the reader to quickly see the proposed relationships between the variables and the objective of the study”. As shown in Figure 2.1, the conceptual framework identifies the independent variable which involves assets restructuring and dependent variable which is financial performance of tier three commercial banks in Kenya.

![Conceptual Framework Diagram]

Source: Researcher (2020)
Figure 2.1: Conceptual framework

2.8 Operationalization and Measurement of Variables
Table 2.2 presents the Operationalization and measurement of variables to be used in the study.

**Table 2.2: Operationalization and Measurement of Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Operationalization</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Dependent</td>
<td>-Earnings After Tax</td>
<td>Net Profit / Total Assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Total Assets</td>
<td></td>
</tr>
<tr>
<td>Restructured loans</td>
<td>Independent</td>
<td>-Total Loans in Default</td>
<td>Total Loans in Default / Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Total Loans Advanced</td>
<td>Loans Advanced</td>
</tr>
<tr>
<td>Non-performing assets</td>
<td>Independent</td>
<td>-Total Debts</td>
<td>Non-Performing assets = Net non-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Total Equity</td>
<td>performing assets / Loans given</td>
</tr>
<tr>
<td>Assets level management</td>
<td>Independent</td>
<td>-Investment of Current asset, Debtors</td>
<td>Total operating income / Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>assets</td>
</tr>
<tr>
<td>Written-off assets</td>
<td>Independent</td>
<td>-Total Current Assets</td>
<td>Liquidity = Total Current Assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Total Current Liabilities</td>
<td>Total Current Assets / Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Current Liabilities</td>
</tr>
</tbody>
</table>

Source: Researcher (2020)
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter describes how the research study was conducted, explains the research design that the study applied, data collection methods applied, and how this data was analyzed to produce the required information for this study.

3.2 Research Design
According to Ramesh et al., (2019) “research design is a blueprint for conducting research which provides a clear plan on how the research will be conducted and helps the researcher in sticking to the plan”. The research design is dictated by the research questions. The casual research design was adopted for this study. Wangige (2016) recommends ”the use of the casual research design because it measures the effect a specific change will have on existing norms and assumptions” while according to Beach and Pedersen (2016) noted that, ”this approach is suitable for understanding a phenomenon which has a conditional form If X, then Y. The casual effect is present when the change in one phenomenon, usually the independent variable, typically results in a change in another phenomenon, usually referred to as the dependent variable”.

3.3 Population of the Study
According to Ngechu (2016), “population is a set of people, services, elements, events, and a group of things that are being investigated”. The research population included all the twenty-two tier 3 commercial banks licensed and regulated by the Central Bank of Kenya as mandated under the Banking Act cap 488 in Kenya and listed in Appendix II.

3.4 Sample Size
A sample is a segment of the population under study. The study employed the census study type; all tier 3 banks will act as a sample size as listed in Appendix II and the study will use their audited financial statements for the period between 2010 to 2019. Census study type was preferred because it solves the accuracy problems associated with sampling and the study population was small thus making it possible to collect the data.
3.5 Data Collection
The data technique that was used in this study is a documented method, which uses the already available data downloaded from the Central Bank of Kenya and registered tier three banks' websites. Secondary data was obtained from yearly financial reports to derive the return on asset, return on equity, and return on average capital employed. This secondary data was largely quantitative and descriptive type and therefore will be obtained from banks' annual financial statements, audited financial statements, and the Central Bank of Kenya banking sector reports for the ten years beginning 2010 to 2019.

3.6 Data Analysis and Presentation
According to Mugenda & Mugenda (2016), “Data analysis is the process which starts immediately after data collection and ends at the point of interpretation and processing” The study employed both regression and correlation analysis to analyze data by Statistical Package for Social Sciences software and data analyzed was presented using descriptive statistics. Regression analysis was used to come up with the model to express the relationship between the dependent variable. The study adopted the cross-sectional model, which is similar to that used by kimathi (2015) and to Karanja (2015) in their study. The study applied the following multiple regression equation;

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

Whereby \( Y \) = Financial performance as measured by ROI, ROE, and ROCE.
\( \alpha \) = constant variable
\( X_1 \) = Restructured loans
\( X_2 \) = Asset level management
\( X_3 \) = Non-performing assets
\( X_4 \) = Written off assets
\( \beta_1, \beta_2, \beta_3, \text{and} \beta_4 \) are Beta coefficients of determination, and \( \varepsilon \) is the error term.

3.7 Diagnostic Tests.
In compliance with the validity tests, the researcher subjected the data to diagnostic tests which were performed by evaluation of the model’s statistical structure. According to Everitt & Skrondal (2010) noted that "The diagnostic test can be in form of graphs, qualitative analysis, and hypothesis tests. The three main assumptions of any regression models are non-multicollinearity, normality, and homoscedasticity". This study data was subjected to
heteroscedasticity, normality tests, and multicollinearity to guarantee that the data collected will be appropriate for regression analysis.

### 3.7.1 Heteroscedasticity
According to Gujarati (2003) noted that "Heteroscedasticity is said to be present when the disturbances in the regression model have similar variances and the presence of heteroscedasticity in the model results in unbiased estimates of the relationship between the dependent and independent variables. The observed R2 and the chi-square will be estimated and used to indicate the presence of homoscedasticity. If the calculated chi-squared value obtained for the observed R2 is greater than the critical chi-square value at a chosen level of significance (5%) then the null hypothesis of homoscedasticity is accepted. To deal with heteroscedasticity in the model, a weighted regression can be used”.

### 3.7.2 Multicollinearity
According to Pedace (2013) who noted that "When two or more of the independent variables in the model have a high degree of linear relation, that is, one or more of the independent variables can predict the value of another variable with a high degree of accuracy, then multicollinearity is said to be present. Where multicollinearity is present, the coefficients estimated by the multiple regression models may change erratically due to any small change in the explanatory variables. The presence of multicollinearity does not reduce the reliability of the model but affects the individual predictors”. Hossain (2012) pointed out that, “tolerance values of less than 0.2 are as a rule of thumb considered unacceptable” while Gujarati (2003) emphasized that, “To deal with multicollinearity, the data can be transformed into the first difference”.

### 3.7.3 Normality Tests
Razali & Wah (2011) noted that "Data that is not normally distributed provides estimates that have incorrect t-tests, F-tests, and chi-square test results. These tests are conducted to determine the distribution of the data and Non-normal distribution occurs when one of the variables has the wrong functional form. Kolmogorov-Smirnov (KS) Test will be used in this research to check for normality”. Additionally, Pennsylvania State University (2017a) noted that "The KS test is defined by the following hypothesis: H0: The data follows normal distribution and HA: The data
does not follow a normal distribution Probabilities that are >0.05 indicates that the data is normally distributed while < 0.05 indicates that the data is not normally distributed”.

3.8 Ethical Considerations
The researcher took into consideration all moral principles, ethical standards and guidelines required for research project from inception to completion of this project and ensuring the data collected was only used for research purposes.
CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The overall objective of this research was to determine the effect of asset restructuring on financial performance of tier three commercial banks in Kenya. In pursuing this objective the following specific objectives were set: To examine the influence of restructured loans on the financial performance of tier three commercial banks in Kenya, to investigate the influence of non-performing assets on the financial performance of tier three commercial banks in Kenya, to examine the influence of assets level management on the financial performance of tier three commercial banks in Kenya and to investigate the influence of written-off assets on the financial performance of tier three commercial banks in Kenya. This chapter presents the results of empirical analysis of secondary data collected in line with the research design of the study described in chapter three which included a detailed analysis of the descriptive statistics of the data, panel model specification test and the general method of moment earlier formulated.

4.2 Panel Data Descriptive Statistics

This section contains the descriptive statistics of all variables included in the analysis. The table 4.1 presents the summaries of the descriptive statistics of all the dependent variables and independent variables in this research project.

A normally distributed curve or data assumes a Kurtosis value of 3. A kurtosis value above 3 is a kleptokurtic curve while a kurtosis value below 3 is a mesokurtic curve. A normally distributed curve/data assumes a skewness value of zero and equally distributed errors between the two tails. A probability value of more than 0.1 signifies a normally distributed curve. A Jarque-Bera value close to zero signifies a normally distributed curve.
Table 4.1: Descriptive statistics Table

<table>
<thead>
<tr>
<th></th>
<th>PRT</th>
<th>ALM</th>
<th>NPA</th>
<th>RLO</th>
<th>WOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.014265</td>
<td>0.894794</td>
<td>5.678037</td>
<td>0.184233</td>
<td>1.201275</td>
</tr>
<tr>
<td>Median</td>
<td>0.014048</td>
<td>0.899327</td>
<td>5.404813</td>
<td>0.129999</td>
<td>1.159358</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.071682</td>
<td>1.154730</td>
<td>18.54155</td>
<td>1.413347</td>
<td>3.669388</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.135431</td>
<td>0.681598</td>
<td>0.355599</td>
<td>0.009151</td>
<td>0.520295</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.024855</td>
<td>0.069621</td>
<td>2.793218</td>
<td>0.183782</td>
<td>0.274382</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.303289</td>
<td>-0.227846</td>
<td>1.045166</td>
<td>3.074907</td>
<td>4.189856</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>9.129404</td>
<td>4.214663</td>
<td>5.035805</td>
<td>15.90229</td>
<td>34.81218</td>
</tr>
<tr>
<td>Sum</td>
<td>3.138249</td>
<td>196.8548</td>
<td>1249.168</td>
<td>40.53131</td>
<td>264.2804</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>0.135292</td>
<td>1.061497</td>
<td>1708.653</td>
<td>7.396899</td>
<td>16.48746</td>
</tr>
<tr>
<td>Observations</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
</tr>
</tbody>
</table>

Source: Study Data (2020)

The researcher sought to investigate trends in profitability (Earnings after tax / total assets) in tier three commercial banks of Kenya from 2010 to 2019. From the study findings as shown in table 4.1, it can be noted that profitability has a positive mean of 0.014265 while median of 0.14045 and a standard deviation of 0.024855 with a negative skewness of -1.303289 and kurtosis of 9.129404. This shows that tier three commercial banks management efficiency is not too the standard and needs improvement hence shows the management is not generating adequate profits in relation to the resources invested in the tier three commercial banks hence affects financial performance.

The researcher sought to examine trends in assets level management (Total Current Assets/Total Assets) in tier three commercial banks of Kenya from 2010 to 2019. From the findings as shown in table 4.1, it can be noted the results shows a positive mean of 0.894794 while median of 0.899327 and a standard deviation of 0.069621 with a negative skewness of -0.0227846 and kurtosis of 4.214663. This shows that tier three commercial banks assets level management is inadequate and
needs improvement hence shows the management is not generating adequate revenue to finance the commercial banks operations hence the effect of assets level management effect on financial performance is proven.

The researcher sought to investigate trends in non-performing assets (Total Debt / Total Equity) in tier three commercial banks of Kenya from 2010 to 2019. From the findings as shown in table 4.1, it can be noted that the findings show a positive mean of 5.678037 while median of 5.404813 and a standard deviation of 2.793218 with a positive skewness of 1.045166 and kurtosis of 5.035805. This shows that tier three commercial banks non-performing assets during the study period is inadequate hence affects the financial performance the tier three commercial banks operations.

The researcher sought to investigate trends in restructured loans (Total Loans in Default / Total Loans Advanced) in tier three commercial banks of Kenya from 2010 to 2019. From the findings as shown in table 4.1, it can be noted that the findings shows a positive mean of 0.184233 while median of 0.129999 and a standard deviation of 0.183782 with a positive skewness of 3.074907 and kurtosis of 15.90229. This shows that tier three commercial banks restructured loans is inadequate and needs improvement hence shows the management is not generating adequate revenue from restructured loans to recover them or finance the commercial banks operations hence the effect of restructured loans on financial performance is proven.

The researcher sought to investigate trends in written off assets (Total Current Assets/Total Current Liabilities) in third tier commercial banks of Kenya from 2010 to 2019. From the findings as shown in table 4.1, it can be noted from the findings that the mean is 1.201275 while median of 1.159358 and a standard deviation of 0.274382 with a positive skewness of 0.274382 and kurtosis of 34.81218. this shows that tier three commercial banks written off assets is inadequate/inefficient and needs improvement hence shows the management is not generating adequate revenue to finance the commercial banks operations hence the effect of written off assets effect on financial performance is proven.
4.3 Diagnostic Test

To determine the suitability of the panel data for statistical analysis in this research, various tests were conducted and this tests that were carried out to establish if the panel data fulfilled the cardinal requirement of classical linear regression analysis include: normality test, multicollinearity test and Heteroscedasticity test. Due to the fact that the analysis is based on panel data, multicollinearity test and Heteroscedasticity test will not be conducted.

4.3.1 Normality Test

Razali & Wah (2011) noted that, “Data that is not normally distributed provides estimates that have incorrect t-tests, F-tests, and chi-square test results. These tests are conducted in order to determine the distribution of the data and Non-normal distribution occurs when one of the variables has the wrong functional form. Kolmogorov-Smirnov (KS) Test will be used in this research to check for normality”. Additionally, Pennsylvania State University (2017a) noted that, “The KS test is defined by the following hypothesis: H0: The data follows normal distribution and HA: The data does not follow a normal distribution Probabilities that are >0.05 indicates that the data is normally distributed while < 0.05 indicates that the data is not normally distributed”.

Table 4.2 Normality Tests Results

<table>
<thead>
<tr>
<th></th>
<th>PRT</th>
<th>ALM</th>
<th>NPA</th>
<th>RLO</th>
<th>WOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jarque-Bera</td>
<td>406.6686</td>
<td>15.42808</td>
<td>78.04492</td>
<td>1872.651</td>
<td>9920.481</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000000</td>
<td>0.000447</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Study Data (2020)

From the Table 4.2 it shows that profitability having a Jarque- Bera of 406.6686 and a probability of 0.0000, assets level management probability of 0.00000 and Jarque- Bera of 15.42808, Non-performing assets having probability of 0.000447 and Jarque- Bera 78.04492, Restructuring loans having probability of 0.00000 and Jarque- Bera of 1872.651, written off assets having a probability of 0.00000 and Jarque- Bera of 9920.481. Therefore, from the data presented in table 4.2 shows that all the variables were normally distributed because the probability values were above 0.1 and the Jarque- Bera values were closer to zero.
4.3.2 Heteroscedasticity test

Heteroscedasticity means that previous error terms influence other terms and hence violating the statistical assumption that the error terms have a constant variance but, homoscedasticity suggests that the dependant variable has an equal level of variability for each of the values of the independent variables (Garson, 2012).

As Shown in Table 4.3, Durbin-Watson statistic Heteroscedasticity test confirms that there was no heteroscedasticity in the error correction model since the probability chi-square value of the observed is 2.901869 which is closer to 2 than 4 as per the rule therefore means the model is not stable and there is effects of extraneous variables like RLO hence prove of serial correlation in the model.

Table 4.3 Heteroscedasticity test

<table>
<thead>
<tr>
<th>Weighted Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>S.E. of regression</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
</tr>
</tbody>
</table>

Source: Study Data (2020)

4.3.3 Multicollinearity

According to Gujarati (2003), “The use of multivariate hypothesis test is based on the assumption of no significant multicollinearity between the explanatory variables. Thus, to investigate the existence of multicollinearity, the variance inflation factors (VIFs) for each of the explanatory variables are computed as depicted table (4.4). The variance inflation factor (VIF) is commonly used to identify the presence of multicollinearity. If VIF is bigger than 10 this means that there is a problem with multicollinearity”.

As reported in table 4.4, The mean VIF is 1.416, which is lower than ten (10), a number that is used as a rule of thumb as an indicator of multicollinearity problems (Field, 2000). Thus, these results support the lack of presence of multicollinearity in the research model.
### Table 4.4 Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRT</td>
<td>1.590</td>
<td>0.629</td>
</tr>
<tr>
<td>ALM</td>
<td>1.570</td>
<td>0.636</td>
</tr>
<tr>
<td>NPA</td>
<td>1.340</td>
<td>0.748</td>
</tr>
<tr>
<td>RLO</td>
<td>1.300</td>
<td>0.771</td>
</tr>
<tr>
<td>WOA</td>
<td>1.280</td>
<td>0.779</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.416</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.4 Inferential statistics

Gujarati (2003) noted that “The inferential statistics involved the use of correlation and multiple linear regression analysis and correlation analysis shows the relationships between the different variables considered in a study”. In this The regression analysis was done using panel data models, F-statistic and t-statistic was used to carry out tests of significance for the overall fit of the model (R2) and the independent variables respectively.

#### 4.4.1 Correlation analysis

In this study, the Pearson correlation coefficient was used to test the presence of association between the variables. Values between 0 and 0.3 (0 and -0.3) indicate no correlation (variables not associated), 0.3 and 0.5 (-0.3 and -0.5) a weak positive (negative) linear association, Values between 0.5 and 0.7 (-0.5 and -0.7) indicate a moderate positive (negative) linear association and Values between 0.7 and 1.0 (-0.7 and -1.0) indicate a strong positive (negative) linear association. The significance of the relationship was tested at 95% level with a 2-tailed test where a statistically significant correlation is indicated by a probability value of less than 0.025. This means that the probability of obtaining such a correlation coefficient by chance is less than 2.5 times out of 100, so the result indicates the presence of an association. The correlation analysis results are presented in Table 4.5.
Table 4.5 Correlation analysis Results

<table>
<thead>
<tr>
<th>Correlation</th>
<th>PRT</th>
<th>ALM</th>
<th>NPA</th>
<th>RLO</th>
<th>WOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRT</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALM</td>
<td>0.264170</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPA</td>
<td>-0.134940</td>
<td>0.163386</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RLO</td>
<td>-0.165224</td>
<td>-0.021723</td>
<td>-0.069986</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>WOA</td>
<td>-0.029914</td>
<td>0.027326</td>
<td>-0.471613</td>
<td>0.113657</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Study Data (2020)

From the table 4.5, it shows that: ALM had a correlation coefficient of 0.26 signifying a weak positive correlation profitability. NPA, RLO and WOA had correlation coefficients of -0.13, -0.17 and -0.03 respectively signifying weak negative correlations with profitability.

4.4.2 Unit root tests

Unit root tests at Intercept and Level I (0)

PRT, ALM, NPA and WOA were found to be stationary at intercept and level I (0) because the Levin, Lin & Chu t* had probability values of 0.0000, 0.0000, 0.0000 and 0.0000 respectively which are significant at 5% level of significance. Therefore, we reject the null hypothesis that they have unit roots. RLO was found not to be stationery because the Levin, Lin & Chu t* had a probability value of 0.2455 which is not significant at 5 percent level of significance. Therefore, we accept the null hypothesis that RLO has a unit root. Hence all the variables were iterated to their first difference as shown in the table 4.6 - 4.10 below:

Table 4.6 PRT Results at Level I (0)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-6.13748</td>
<td>0.0000</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-3.02479</td>
<td>0.0012</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>79.1233</td>
<td>0.0009</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>112.597</td>
<td>0.0000</td>
<td>22</td>
<td>198</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.
### Table 4.7 ALM Results at Level I (0)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Crosssections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-73.2159</td>
<td>0.0000</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-13.1456</td>
<td>0.0000</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>81.7864</td>
<td>0.0005</td>
<td>22</td>
<td>189</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>69.6929</td>
<td>0.0081</td>
<td>22</td>
<td>198</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

### Table 4.8 NPA Results at Level I (0)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Crosssections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-10.0457</td>
<td>0.0000</td>
<td>22</td>
<td>194</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-3.45016</td>
<td>0.0003</td>
<td>22</td>
<td>194</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>81.2809</td>
<td>0.0005</td>
<td>22</td>
<td>194</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>70.1055</td>
<td>0.0074</td>
<td>22</td>
<td>198</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

### Table 4.9 RLO Results at Level I (0)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Crosssections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-0.68868</td>
<td>0.2455</td>
<td>22</td>
<td>191</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>1.61031</td>
<td>0.9463</td>
<td>22</td>
<td>191</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>33.3465</td>
<td>0.8791</td>
<td>22</td>
<td>191</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>38.4446</td>
<td>0.7079</td>
<td>22</td>
<td>198</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.
Table 4.10 WOA Results at Level I (0)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td>-19.1665</td>
<td>0.0000</td>
<td>22</td>
<td>196</td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-19.1665</td>
<td>0.0000</td>
<td>22</td>
<td>196</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td>-13.8169</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-13.8169</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>106.883</td>
<td>0.0000</td>
<td>22</td>
<td>196</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>95.1419</td>
<td>0.0000</td>
<td>22</td>
<td>198</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Unit root tests at first difference I (I)

All the variables were found to be stationary at first difference I (I) because their Levin, Lin & Chu t* had a probability values of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that they have unit roots.

Table 4.11 PRT Results at Level I (I)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td>-13.8169</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-13.8169</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td>-7.83412</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-7.83412</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>152.986</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>206.352</td>
<td>0.0000</td>
<td>22</td>
<td>176</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.
### Table 4.12 ALM Results at Level I (I)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-43.3410</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-11.8263</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>140.690</td>
<td>0.0000</td>
<td>22</td>
<td>168</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>145.254</td>
<td>0.0000</td>
<td>22</td>
<td>176</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

### Table 4.13 NPA Results at Level I (I)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-11.6745</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-5.20973</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>121.884</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>152.211</td>
<td>0.0000</td>
<td>22</td>
<td>176</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

### Table 4.14 RLO Results at Level I (I)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-11.6745</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-5.20973</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>121.884</td>
<td>0.0000</td>
<td>22</td>
<td>170</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>152.211</td>
<td>0.0000</td>
<td>22</td>
<td>176</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.
Table 4.15 WOA Results at Level I (I)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-sections</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levin, Lin &amp; Chu t*</td>
<td>-12.4599</td>
<td>0.0000</td>
<td>22</td>
<td>169</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im, Pesaran and Shin W-stat</td>
<td>-7.74271</td>
<td>0.0000</td>
<td>22</td>
<td>169</td>
</tr>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>150.912</td>
<td>0.0000</td>
<td>22</td>
<td>169</td>
</tr>
<tr>
<td>PP - Fisher Chi-square</td>
<td>242.678</td>
<td>0.0000</td>
<td>22</td>
<td>176</td>
</tr>
</tbody>
</table>

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.4.3 Regression Equation

The coefficients are the estimates that ascend from the regression analysis and give the variance in the dependent variable attributable to the independent variables and include the following:

4.4.3.1 Hausman test

The table 4.16 below shows the results from the Hausman test. The Chi-square test statistic is 1.555336 with an insignificant probability value of 0.8168. This therefore meant that the null hypothesis was rejected in favor of the Random effects model. Therefore, we accept the Random effects model as suitable for this study as shown in the table 4:16 below.

Table 4.16 Hausman Results

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>1.555336</td>
<td>4</td>
<td>0.8168</td>
</tr>
</tbody>
</table>

** WARNING: estimated cross-section random effects variance is zero.

Source: Study Data (2020)
4.4.3.2 Random effects model

Table 4.17 Random effects model Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D_ALM</td>
<td>0.020649</td>
<td>0.031168</td>
<td>0.662515</td>
<td>0.5084</td>
</tr>
<tr>
<td>D_NPA</td>
<td>-0.001776</td>
<td>0.000866</td>
<td>-2.052087</td>
<td>0.0415</td>
</tr>
<tr>
<td>D_RLO</td>
<td>0.001011</td>
<td>0.010792</td>
<td>0.093685</td>
<td>0.9255</td>
</tr>
<tr>
<td>D_WOA</td>
<td>-0.014126</td>
<td>0.007260</td>
<td>-1.945716</td>
<td>0.0531</td>
</tr>
<tr>
<td>C</td>
<td>-0.001211</td>
<td>0.001586</td>
<td>-0.763562</td>
<td>0.4461</td>
</tr>
</tbody>
</table>

Effects Specification

<table>
<thead>
<tr>
<th></th>
<th>S.D.</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>0.000000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
<td>0.022202</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Weighted Statistics

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.033266</td>
<td>Mean dependent var</td>
<td>-0.001180</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.013230</td>
<td>S.D. dependent var</td>
<td>0.021463</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.021321</td>
<td>Sum squared resid</td>
<td>0.087732</td>
</tr>
<tr>
<td>F-statistic</td>
<td>1.660322</td>
<td>Durbin-Watson stat</td>
<td>2.901869</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.160850</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unweighted Statistics

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.033266</td>
<td>Mean dependent var</td>
<td>-0.001180</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.087732</td>
<td>Durbin-Watson stat</td>
<td>2.901869</td>
</tr>
</tbody>
</table>

Source: Study Data (2020)

From the table 4:17 shows that: ALM had a coefficient of 0.02 and an insignificant probability value of 0.5084. This means that ALM had no significant effect on Profitability during the period of study. They had a positive but insignificant relationship.

From the table 4:17 shows that: NPA had a coefficient of -0.001776 and a significant probability value of 0.0415 which is significant at 5 percent level of significance. This indicates that when NPA reduced by 0.001776 percent per year profitability increased by 1 percent in the same year.
From the table 4:17 shows that: RLO had a coefficient of 0.001011 and an insignificant probability value of 0.9255. This means that RLO had no significant effect on Profitability during the period of study. They had a positive but insignificant relationship.

From the table 4:17 shows that: WOA had a coefficient of -0.014126 and a significant probability value of 0.0531 which is significant at 5 percent level of significance. This indicates that when WOA reduced by 0. 0.014126 percent per year profitability increased by 1 percent in the same year.

From the table 4:17 shows that: The gradient represented by constant C had a coefficient of -0.001211 and an insignificant probability value of 0.4461. This means that jointly the proxies did not influence or affect profitability during the period of study.

As per the SPSS generated output as presented in table 4.17, the coefficients were used to answer the following regression model which relates the predictor variables (independent variables) and the dependent variables.

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

Whereby Y = Financial performance as measured by ROI,
\( \alpha = \) constant variable
\( X_1= \) Restructured loans
\( X_2= \) Asset level management
\( X_3= \) Non-performing assets
\( X_4= \) Written off assets
\( \beta_1, \beta_2, \beta_3, \) and \( \beta_4 \) are Beta coefficients of determination, and \( \epsilon \) is the error term.

Based on these coefficients, the regression model therefore becomes:

\[ \text{ROI} = -0.001211 + 0.001011X_1 - 0.020649X_2 - 0.001776X_3 - 0.014126X_4 + \epsilon. \]
From the regression model obtained above, Constant = -0.001211, shows that if all the independent variables (Restructured loans, Asset level management, Non-performing assets, written off assets) all rated as zero, RLO would rate = -0.01011. While holding the other factors constant a unit increase in assets level management of the bank led to 0.020649 increase in ROI. A unit increase in Non-performing assets while holding the other factors constant would lead to an increase in ROI of banks by a negative factor of -0.001776, a unit change in Written off assets while holding the other factors constant would lead to a decrease of ROI of -0.14126. This proves the fact that NPA and written off assets have negative effect on the financial performance of tier three commercial banks and other variables almost to negative value. These findings are similar to some empirical studies by Riany et. al., (2012), Ngige (2012), Ithiri (2014), Karanja (2015), Nkegbe & Ustarz (2015), Murithi (2016), Cascio (2012), Isanzu (2017), Sun & Chang (2011) which analysed the effect of assets restructuring on financial performance of corporate institutions more so commercial banks which have similar operating conditions.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter presents a summary of the findings, conclusion, and recommendation of the study. The recommendations are made in relation to the conclusion of the study while the recommendation for further studies is essential for the extension of the study.

5.2 Summary of Findings
The overall objective of this research was to determine the effect of asset restructuring on the financial performance of tier three commercial banks in Kenya. In pursuing this objective the following specific objectives were set: To examine the influence of restructured loans on the financial performance of tier three commercial banks in Kenya, to investigate the influence of non-performing assets on the financial performance of tier three commercial banks in Kenya, to examine the influence of assets level management on the financial performance of tier three commercial banks in Kenya and to investigate the influence of written-off assets on the financial performance of tier three commercial banks in Kenya.

This research established that, on the normality test, all the variables were normally distributed because the probability values were above 0.1 and the Jarque-Bera values were closer to zero. The study established that restructured loans have a negative and statistically significant effect on the financial performance of tier three commercial banks in Kenya. Restructured loans had a coefficient of 0.001011 with an insignificant probability value of 0.9255 meaning restructured loans had a significant effect on profitability during the period of study.

The research found out that, assets level management had a coefficient of 0.020649 and a significant probability value of 0.5084 which is significant at the 5 percent level of significance. This means when assets level management improves profitability by 0.020649.

The research found out that, Non-performing assets had a coefficient of -0.001776 with an insignificant probability value of 0.0415 meaning non-performing assets had significant effect on profitability during the period of study.
The research found out that, written off assets had a coefficient of -0.014126 and a significant probability value of 0.0531 which is not significant at the 5 percent level of significance. This means when written off assets decrease by -0.014126 to the ratio of profitability. The constant C had a coefficient of -0.001211 with a significant probability of 0.4461 during the period of study.

5.3 Conclusion
The overall objective of this research was to determine the effect of asset restructuring on the financial performance of tier three commercial banks in Kenya. Specifically, the study sought to establish the effect of non-performing assets, restructured loans, assets level management, and written-off assets which are variables of financial restructuring on the financial performance of tier three commercial banks in Kenya.

The study found that assets level management had a positive and statistically significant effect on the financial performance of tier three commercial banks. The study found that an increase in the amount of assets level management will increase the financial performance of tier three commercial banks in Kenya. The results indicate that assets level management has a very large effect on the financial performance of tier three commercial banks in Kenya.

The study established that restructured loans have a positive and statistically significant effect on the financial performance of tier three commercial banks in Kenya. Therefore, the various banks need still to redefine their lending policies and regulations on insider loan default treatment to ensure the stable financial performance of tier three commercial banks. The risk of higher loan default of this loan needs to be studied if its management inefficiency to collect the loans or the lenders cannot comply with their agreements.

The study found that Non-performing assets had a negative and statistically significant effect on the financial performance of tier three commercial banks. The study found that an increase in the amount of Non-performing assets will result in a decrease in the financial performance of tier three commercial banks in Kenya. The results indicate that Non-performing assets have a very large effect on the financial performance of tier three commercial banks in Kenya.
The study determined that written off assets that signify liquidity had a negative and statistically significant effect on the financial performance of tier three commercial banks in Kenya. The study established that an increase in the liquidity of tier three commercial banks will lead to an increase in the financial performance of tier three commercial banks in Kenya. However, the increase is statistically insignificant in this study. Therefore, liquidity is a factor in the sustainability of these banks and the regulator should monitor this factor to ensure the insolvency of tier three commercial banks. Additionally, this indicator affects bank investors' attraction.

5.4 Recommendations
Based on the findings, this research study recommends that the managers of tier three commercial banks review their mix of assets management, loans, and level of leverage strategies or policies, and this recommendation is based on the finding that restructured loans hurt financial performance while assets level management has positive effects.
Where the tier three commercial banks have too many non-performing loans, the amount of loss on loans will exceed the amount of revenue hence losses realized from using leverage to provide financing for their activities. Further, the study recommends to the managers of tier three commercial banks should work on strategies of reducing on the level of liabilities on their balance sheets to attain financial stability and this is based on the finding that leverage has a positive effect on financial performance which reduces the chances of financial distress.
At the policy level, the study recommends that the Central bank of Kenya (CBK) should review the liquidity requirements placed on tier three commercial banks. This is based on the finding that liquidity does not improve the financial performance of tier three commercial banks. The amount held as liquid assets can be used for investments. The study also recommends that the CBK should vigorously monitor the number of loans and non-performing loans held by tier three commercial banks. The study indicates that non-performing loans could lead to financial distress which will make potential investors shy away from association with these banks.
From the findings increase in profit after tax and sales revenue has a positive and significant increase in bank financial performance. The study recommends that tier three commercial banks should also try to stay competitive to increase their earnings ability. This can be achieved through continuous product innovation, marketing, and leveraging in technology.
From the findings of this study showed that the increase in liquidity causes a significant increase in tier three bank performance the study, therefore, recommends that banks continue to keep the recommended liquidity levels to be able to fulfill the customer demand for their deposits to avoid bank runs and panic in the market. Since tier three banks are less profitable considering liquidity results, bank managers should be encouraged to invest in more liquid assets. This will not only improve bank profitability but it will also enable tier three banks to meet their short-term obligations as they fall due.

5.5 Limitations of the Study

The limitation of this study which may have affected the study findings are both time-related and methodology. The study was conducted for 10 years only. A longer period may be necessary to determine the significance of the variables to the study objective. Data collection and analysis were tedious when conducting diagnostic tests since some banks have been acquired during the duration of the study, are on receivership hence not active on trading, or have winded up their operations so accurate information is inadequate. Obtaining accurate financial statements for the banks was not easy since the CBK banks' supervisory report had a slight difference with some banks audited financial statements, so the researcher went for the audited financial statements. The results of this research study largely depended on secondary information analyses. The study results are subjected to the limitations of the bank's financial statements as reported to the general public which was under the custody of the CBK supervision department. The data available was only for the period year 2010 to 2018. The study had the limitation of not having access to data as targeted and hence the unbalanced panel data was obtained. This was also since most 2019 financial statements haven't been audited as per regulations due to the absence of the Auditor general during the year hence the CBK hasn't incorporated them in their reports. Further, the study was undertaken in Kenya which exemplifies the context of an emerging economy with regulatory, economic, and political characteristics that are unique to the country with only 22 tier three commercial banks as the sample and population which is not too representative of the businesses operating within the economy. The application of the study results may, therefore, be considered to be too restrictive and future studies should consider broader jurisdiction or other countries having tier three commercial banks.
5.6 Further Research Recommendations

This research provides insight into the relationship between assets restructuring and the financial performance of tier three commercial banks in Kenya. The study only analyzed four independent variables on assets restructuring (written-off assets, restructured loans, non-performing assets, and assets level management) as affecting financial performance hence this study recommends that further studies should be conducted that incorporate the other variables.

In future research work, it will be useful to comprehend the factors that impact the effectiveness of the monetary policy of the Central Bank since the money supply is significantly and negatively related to bank financial performance. This is because the Central bank can have the right policy objectives but certain fundamental factors in the industry can be an obstruction to the realization of these objectives.

This research was mainly based in Kenya and all the banks analyzed are licensed by one regulator which is CBK, future researchers need to undertake similar studies in other jurisdictions to determine if the variables stated have a significant or insignificant effect on the financial performance of tier three commercial banks.

This research, therefore, suggests a similar study with the same variables should be carried in microfinance institutions and national Saccos in Kenya to determine their financial performance and assist them to improve their operations to attain financial independence.
REFERENCES


Makau, D. N. (2012). Strategic alliances and organizational competitiveness among


Agriculture and Technology


Research, 4(4).

**APPENDIX 1: DATA COLLECTION SHEET**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Profitability</th>
<th>Restructured loans</th>
<th>Non-performing assets</th>
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</table>
APPENDIX II: LIST OF TIER THREE BANKS IN KENYA AS DEC 2019

1) Consolidated Bank
2) ABC Bank
3) Jamii Bora Bank
4) Credit Bank
5) Middle East Bank
6) Habib A.G Zurich Bank
7) Giro Bank
8) Gulf Africa
9) Habib Bank
10) Sidian Bank
11) Development Bank
12) Fidelity Bank
13) Paramount Universal Bank
14) Equatorial Commercial Bank
15) UBA Bank
16) Oriental Commercial Bank
17) Trans-National Bank
18) Guardian Bank
19) Consolidated and Development Bank
20) Victoria Bank
21) First Community Bank
22) Paramount Universal

Source: Central Bank of Kenya (2019)
APPENDIX III: TIME PLAN

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<th>NO.</th>
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## APPENDIX IV: BUDGET

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<td>d) Traveling</td>
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