

**RELATIONSHIP BETWEEN CAPITAL RESTRUCTURING AND  
FINANCIAL PERFORMANCE OF LISTED FIRMS IN KENYA**


**ITHUKU ELIDA MWENI**

**A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS OF  
THE UNIVERSITY OF NAIROBI**

**2020**

## DECLARATION


This research project is my original work and has not been presented for a degree in any other university.

Signature  ..... Date.. 01 December 2020 .....

**Ithuku Elida Mweni**

**D63/9949/2018**

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

Signature  ..... Date 01 December 2020 .....

**Prof. Iraya Mwangi**

Department of Finance & Accounting

University of Nairobi

## **ACKNOWLEDGEMENTS**

I appreciate my supervisor, Prof. Iraya Mwangi, for his objective guidance. I appreciate my mother, Elizabeth Ithuku, who tirelessly supported me and motivated me in my studies. I also appreciate the moral and financial support from my parents and friends. I thank colleagues and lecturers from the University for their Support.

## **DEDICATION**

I dedicate this project to My mother, Elizabeth Loko Ithuku.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>LIST OF FIGURES</b> .....	<b>ix</b>
<b>LIST OF ABBREVIATIONS AND ACRONYMS</b> .....	<b>x</b>
<b>ABSTRACT</b> .....	<b>xi</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background to the Study.....	1
1.1.1 Capital Restructuring .....	2
1.1.2 Financial Performance .....	4
1.1.3 Capital Restructuring and Financial performance .....	5
1.1.4 Listed Firms in Kenya.....	6
1.2 Research Problem .....	7
1.3 Research Objective .....	8
1.4 Value of the Study .....	8
<b>CHAPTER TWO</b> .....	<b>10</b>
<b>LITERATURE REVIEW</b> .....	<b>10</b>
2.1 Introduction.....	10
2.2 Theoretical Review .....	10
2.2.1 Trade-off Theory.....	10
2.2.2 Contingency Theory.....	11
2.2.3 Institutional Theory.....	12
2.3 Determinants of Financial Performance of Listed Firms.....	13
2.3.1 Capital Restructuring .....	13
2.3.2 Liquidity.....	14
2.3.3 Firm Size .....	15
2.3.4 Tangibility of Assets .....	15
2.4 Empirical Studies .....	16

2.4.1 Global Studies .....	16
2.4.2 Local Studies.....	18
2.5 Conceptual Framework.....	20
2.6 Summary of Literature Review.....	21
<b>CHAPTER THREE .....</b>	<b>22</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>22</b>
3.1 Introduction.....	22
3.2 Research Design.....	22
3.3 Population of The Study .....	22
3.4 Data Collection .....	23
3.5 Diagnostic Tests.....	23
3.5.1 Multicollinearity Test.....	23
3.5.2 Normality Test .....	24
3.5.3 Heteroscedasticity Test .....	25
3.5.4 Autocorrelation Test .....	25
3.6 Data Analysis .....	26
3.6.1 Analytical Model .....	26
3.6.2 Significance Tests .....	27
3.7 Operationalization of Study Variables.....	27
<b>CHAPTER FOUR.....</b>	<b>28</b>
<b>DATA ANALYSIS AND PRESENTATION OF FINDINGS.....</b>	<b>28</b>
4.1 Introduction.....	28
4.2 Descriptive Statistics.....	28
4.3 Diagnostic Tests for Regression .....	29
4.3.1 Multicollinearity Test.....	29
4.3.2 Normality Test .....	30
4.3.3 Heteroscedasticity Test .....	30
4.3.4 Autocorrelation Test .....	31
4.4 Regression Analysis.....	31
4.5 Correlation Analysis .....	33
4.6 Discussions .....	34

<b>CHAPTER FIVE .....</b>	<b>36</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>36</b>
5.1 Introduction.....	36
5.2 Summary .....	36
5.3 Conclusions.....	37
5.4 Policy Recommendations.....	38
5.5 Recommendations for further research.....	38
5.6 Limitations of the study .....	39
<b>REFERENCES.....</b>	<b>40</b>
<b>APPENDICES .....</b>	<b>48</b>
Appendix I: Firms Listed in Kenya .....	48
Appendix II: Data Collection Schedule .....	53

## LIST OF TABLES

Table 3.1: Operationalization Framework .....	27
Table 4.2: Descriptive Statistics .....	28
Table 4.3: Multicollinearity Test .....	29
Table 4.4: Normality Test.....	30
Table 4.5: Model Summary .....	32
Table 4.6: Regression Coefficients .....	32
Table 4.7: Correlation Analysis .....	33



## LIST OF FIGURES

Figure 2.1: Conceptual framework .....	21
Figure 4.2: Heteroscedasticity Test.....	30
Figure 4.3: Autocorrelation Test.....	31

## **LIST OF ABBREVIATIONS AND ACRONYMS**

**ADF** Augmented Dickey Fuller

**CMA** Capital Market Authority

**NSE** Nairobi Securities Exchange

**OLS** Ordinal Least Square

**ROA** Return on Assets

**ROE** Return on Equity

**ROI** Return on Investment

**ROIC** Return on Invested Capital

**VIF** Variance Inflation factor

## **ABSTRACT**

The study sought to determine the relationship between capital restructuring and financial performance of listed firms in Kenya. The study used a descriptive research design. Data was collected for a 10-year period between 2010 and 2019. The data was collected from financial statements of listed firms and annual reports from Nairobi Securities Exchange. The study was based on panel data based on forty-eight firms listed within the period. Descriptive and inferential statistics were used to analyze the data. Multiple regression and correlation analysis were used as inferential statistics. From the findings, debt to capitalization ratio showed a positive effect on ROA of listed firms between 2010 and 2019. The study found that firm size affected ROA of listed firms negatively. From the regression analysis, debt to capitalization ratio showed a significant effect on financial performance as measured by ROA. From the correlation analysis, debt to capitalization ratio showed a significant and positive relationship with ROA. The study concludes that capital restructuring has a positive relationship with financial performance of firms listed in Kenya. Firm size has a controlling negative relationship with financial performance of listed firms in Kenya. The study recommends that listed firms undertake continuous capital restructuring in order to enhance their financial performance. Similar studies in non-listed firms and with a different period is recommended for further research.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

In the current global environment, firms have faced challenges from the dynamic external environment for sustainable growth and improved financial performance as a long-term goal (Kratochvilova, 2011). As countries grow economically, firms are increasingly needed to check on their capital structure and reduce the incidence of having high debt situation while at the same time ensuring a balance between debt and equity for maximization of profitability and shareholders' value (Robbins & Coulter, 2016). Firms restructure their capital due to an increase in the competition and changes in technology calling for redesigning of business process (Gowing, Kraft & Quick, 2018). Robbins and Coulter (2016) posits that where a firm faces a risk of bankruptcy, it is forced to restructure for financial sustainability.

The study was anchored on trade off, contingency and institutional theories. Trade off theory posits that a firm that uses debt other than equity financing faces costs of financial distress despite it benefiting from benefits of taxation (Kraus & Litzenberger, 1973). It posits that where a firm that is listed in a country and has a high level of debt, the firm pays interest on the debt as a financing cost. Contingency theory postulates that firm capital and organizational structure defines the level of firm performance (Reid & Smith, 2010). This hypothesis states

the aim of capital restructuring as improvement of firm's performance or placing the firm in a better solution to meet its financial needs. Institutional benefits theory states that firms restructure in order to gain a position that allows them to attain their profitability and shareholder value while at the same time attaining other long-term objectives (Scott, 2004). Listed firms restructure in order to meet their long-term goals in line with the internal and external changes in the business environment.

Nairobi Securities Exchange has seen sixty-seven firms listed by the end of 2019, an increase from the 61 companies listed in 2014 (NSE, 2015). Despite more firms being listed at the NSE, the firms have faced turbulence in the recent past. Listed firms have been faced by the challenges of economic changes relating to increased level of competition and requirement of minimum capital required for the firms. This has forced listed firms to undergo capital restructuring in order to enhance their capital base and hence meet the conditions for listing. In this turbulent environment, listed firms have to constantly change their capital structure to hedge inherent financial risks expected (Kiarie, 2014). The NSE has seen listed firms go into financial depression due to huge losses and failure to adapt to the changing environment. This has created the need for capital restructuring with the Nairobi Securities Exchange. This study sought to establish whether the restructuring done by listed firms had a relationship with their financial performance.

### **1.1.1 Capital Restructuring**

Capital restructuring is defined as the changing of the firm's capital structure based on the changing business environment and with the aim of funding the growth of a firm (Koh, Dai & Chang, 2012). Gilson (2010), define capital restructuring as the reorganization of a firm's capital structure in order to enhance the financial performance of a firm based on the profitability objective. Capital restructuring is the change in the equity-debt mix when restructuring a firm (Cascio, 2012). In summary, capital restructuring involves changes in the capital structure in term of debt and equity by a firm in order to fit to changing business environment.

Lal, Pitt and Beloucif (2013) note that capital restructuring becomes necessary where a firm seeks to expand operations, increase assets base, gain market share, modify their debt level and alter the ownership structure. Cascio (2012) supports capital restructuring when a firm seeks to maximize profitability or when responding to changing environmental conditions, attempted firm takeover or bankruptcy. Further, capital restructuring replicates the targeted efforts of financial management to maximize shareholder wealth. Nazir and Alam (2010) posits that prospective investors find a firm that restructures its capital to be more appealing due to improved performance metrics.

Capital restructuring is measured through the changing capital structure relating to leverage buyouts, recapitalization and swapping debt with equity (Rogovsky, et al, 2015). According to Javed and Akhtar (2012) measuring capital restructuring in a firm is measured in terms of increase in equity through issue of new shares, changes in the debt policy and the amount of

equity replaced with debt. On the other hand, Bowman et al. (2016) indicated that capital restructuring in a firm is measured through the changes in debt to capital ratio over the years. In this study, the change in debt to capitalization ratio was used to measure the capital restructuring.

### **1.1.2 Financial Performance**

Financial performance is revenue generation through utilization of firm assets (Adams & Mehran, 2015). Financial performance relates to evaluating the financial aspect of a firm in form of financial records based on the financial efficiency of a firm (Amalendu, Somnath & Gautam, 2011). Financial performance is the monetary measurement of the outcomes of a firm (Kwaning, Awuah & Mahama, 2015). Rogovsky (2015) notes that financial performance is defined as the measurement of a firm's financial outcomes for a specified period of time in comparison to other firms within a sector. Financial performance, according to me, is the measurement of a firm's output measured in terms of money.

The productivity (financial) performance is based on a specified period of time, mainly years (Omran & Pointon, 2014). For the financial performance measures to be effective, they need support from the non-financial measures of firm performance (Kaplan & Norton, 2010). Mario (2014) notes that a firm measures financial standing in an attempt to meet long term financial objectives and enhance the periodic financial outcomes of a firm. This is supported by Roberts (2017) who asserts that measurement of financial performance requires activity-based inputs supporting firm's long-term objectives.

Chen and Wong (2014) measured financial performance in term of profitability. This is supported by Ceylan, Emre and Asl (2018) who contends that profitability is the best measurement of a firm's financial performance. He recommended ratios like return on assets (ROA) and return on equity (ROE). Oladipupo and Okafor (2013) measured performance in terms of ROE, ROA, ROI and ROIC. Omran and Pointon (2014), recommended the use of ratios like Tobin Q, marketing, accounting, and economic value added (EVA) to measure firm financial performance. From the different researchers, financial performance is measured through various measures that include Tobin Q, EVA, ROA, ROE, ROI and ROIC. This study measured financial performance in terms of return on assets (ROA).

### **1.1.3 Capital Restructuring and Financial performance**

Capital restructuring has been found to enable a firm to handle financial performance related issues (Bowman et al., 2016). They contended that capital restructuring influence the value of a firm in terms of billions. Roberts (2017) posits that capital restructuring brings a capital structure balance in terms of equity and debt funding which leads to reduction in finance costs and loss of capital while at the same time improving firm performance through increased profits and revenue. In effecting change in capital structure to achieve balanced operative results, capital restructuring reduces financial costs and improve financial ratios over time (Adams & Mehran, 2015). This show that capital restructuring has a direct relationship with financial performance.



Empirically, capital structure has shown mixed results in its relationship with financial performance. Oloyede and Sulaiman (2013) shows capital restructuring to have had a significant impact on firm profitability. Kwaning, Churchill and Opoku (2014); Ongwae and Moronge (2016); and Osoro (2014) in their empirical studies established positive relationship between capital restructuring and financial performance. Norazlan (2018) showed a significant relationship between capital restructuring and firm performance which was negative. Inoue et al (2010) found no relationship between capital restructuring and firm financial performance.

#### **1.1.4 Listed Firms in Kenya**

Globally, capital markets play a key role in economic growth and development through internal and external economic resource mobilization. The markets are also key to the transfer and storage of wealth in a country. Nairobi Securities Exchange came into existence in the 1953 as London stock exchange. Nairobi Securities Exchange (NSE) has been regulated since 1989 (NSE, 2018). By 2019 NSE had sixty-seven firms listed in the securities exchange (NSE, 2018). The firms are based on the sectors in which they operate.

Capital structure of listed firms is a key element considered by the NSE in the listing of firms (Odula, 2015). The firms with capital issues are forced to make changes to their capital in order to improve their capital structure. Other firms are forced to adjust their debt and equity ratios to save them from collapse. The listed firms have faced issues of capital structure which has forced them to restructure. The capital restructuring is expected to improve the financial

performance of listed firms and avoid delisting. The firms therefore need to restructure their capital to meet the needs of the market as the business environment in their industry and nationally changes.

## **1.2 Research Problem**

Capital structure is a major factor influencing financial performance of a firm. Hence capital restructuring is a feasible strategy that can be adopted by a firm in its effort to enhance performance. Capital restructuring enhances firm value, profitability and share value of a firm in a competitive and turbulent environment. According to Roberts (2017), capital restructuring brings in balance in debts and equity funds which in turn influence a firm's financial performance.

In Kenya, listed firms have been experiencing issues related to financial performance (NSE, 2018). For example, Mumias Sugar has been making huge losses which have crippled the sugar manufacturing firm. Other firms experiencing like Uchumi supermarket have also been experiencing financial performance issues. Listed firms have been making changes in their capital structure in an effort to improve their financial performance (Odula, 2015). Improved financial performance is expected to increase confidence in the shareholders and increase investment returns through increased share prices. The improved performance would also increase a firm's financial capacity to get more assets and increase employee base and remuneration. The concepts of restructuring and financial performance have been empirically

compared and related. Globally, Norazlan (2018) examined capital restructuring and its effect on performance of firms listed firms in Malaysia; Oloyede and Sulaiman (2013) studied financial restructuring and performance of Nigerian firms; Gupta (2017) did an impact study on corporate debt restructuring and financial performance of Indian firms.

Local studies have been done on the topic of study. Osoro (2014) studied financial restructuring and financial performance of commercial banks; Kithinji (2017) studied organization restructuring and financial performance in Kenya; while Riany et al (2012) did an impact study on restructuring and performance of Kenyan mobile service providers. Despite the studies focusing on restructuring and financial performance, no local study focused on capital restructuring and financial performance of listed firms within the period of study (2010 and 2019). What is the relationship between capital restructuring and financial performance of firms listed at the NSE?

### **1.3 Research Objective**

To assess the relationship between capital restructuring and financial performance of listed firms in Kenya.

### **1.4 Value of the Study**

The findings of this research will be valuable to various stakeholders in its contribution to theory, policy and practice. Scholars and researchers will get an opportunity to critically

analyze the findings and methodology of the study for review. The researchers will find the research key to further research on capital structure and financial performance. Scholars may find this research as a source of academic literature for their academic research and projects.

This research will make recommendations for policy makers in the capital market like the NSE, CMA and the government. The results of the study may guide policy making in formulation of policies that leads to better financial performance through capital restructuring.

The management of listed firms in Kenya will get a basis for strategy formulation on capital restructuring in their efforts to improve firm's financial performance. From the research, the firm's management will get an understanding on how capital restructuring relates to performance of listed firms. Investors will get information on how capital restructuring relates to performance which will guide their investment decisions at the NSE.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Literature relating to the research was reviewed. This was based on the variables of the study. The study was also conceptualized in this chapter. Studies done on the topic was also empirically reviewed.

#### **2.2 Theoretical Review**

This section reviewed the theoretical basis of the study. This study was based on trade-off, transaction cost, contingency and institutional theories. They are discussed in the subsections below.

##### **2.2.1 Trade-off Theory**

In 1973, trade off theory was postulated by Kraus and Litzenberger. Trade off theory posits that a firm that uses debt other than equity financing faces costs of financial distress despite it benefiting from benefits of taxation. The theory also states that increase in debt financing leads to marginal increase in costs and reduction in benefits. When the benefits decrease and cost increase marginally, a firm requires to replace debt with equity to get a balance between the two for maximization of benefits and minimization of the cost of debt financing.

Trade-off theory further argues that tax benefits trade off against the cost of debt. It states that firm management seek to optimally select the level of debt by balancing taxation benefits and the cost of debt finance (Brealey et al, 2012). Berk (2017) adds that capital structure balance calls for maintenance of a balance between taxation benefits and costs of debt by a firm. However, Danso and Adomako (2014) states that the assumptions of this theory are theoretical and do not hold in reality. This made the theory weak in explaining the capital structure of a firm.

For this study, high interest rate levels will be paid by listed firms with high debt levels. The firms may get bankrupt if they fail to pay the interest on the debt. This calls for an optimal balance of the capital structure through trading off of debt with which would lead to the maximization of the benefits and minimization of debt related costs which may lead to firm getting bankrupt. This in turn would in turn influence the financial performance of the listed firms. This shows that this theory is relevant for the study.

### **2.2.2 Contingency Theory**

Contingency theory was developed by Reid and Smith (2010) from the sociological theory of 1978. Contingency theory postulates that firm capital and organizational structure defines the level of firm performance. The theory states that contingent factors define the organizational structure and design of a firm (Cadez & Guilding, 2018). This theory works under the assumption that the structure of a firm is adopted based on the firm capability, need and objectives/goals with the technology in existence playing a key role (Islam & Hu, 2012). This

means that the capital structure should be a fit for the IT systems which ensures smooth operations of a firm for improved financial performance.

Another assumption fundamental to this theory is that an organizational structure cannot be applicable to every organization (Islam & Hu, 2012). This calls for firms to adjust the structure based on environmental and firm characteristics. The organizational structure changes with the changes in the environment to avoid cases of deteriorating financial performance and make a fit with the environmental fluctuations (Sisaye, 2016). Javed and Jahanzeb (2012) criticized this theory based on the assumption that the capital structure should fit the IT structure for improved performance.

For this study this theory explains the reason listed firms restructure their capital. This theory supports the assertion that restructuring seeks to improve the financial standing of a firm. The theory will guide the reader into understanding the reason for capital restructuring among the listed firms. In this case, firms seek to enhance their financial performance through restructuring their capital to deal with changes in environmental conditions.

### **2.2.3 Institutional Theory**

Institutional theory was developed by Scott in 2004. This theory states that firms are social structures that make them to imitate other firms in form of norms. This in turn reduce adversity across firms (Scott, 2004). Based on the theory, firms find themselves adopting other firm's standards hence increasing the legitimacy of the firms. In this theory, firms are restructured in

an attempt to meet their profitability and shareholder value maximization as the key objectives of the firms (Bealing, Riordann & Rordan 2011). Where listed firms face under capitalization, they may be forced to inject capital. If the firms are underfunded, external financing may be sought (Chege & Kimencu, 2018).

Toma, Dubrow and Hartley (2015) criticizes this theory based on the fact that it assumes the fact that shareholders seek to maximize their earnings and are not interested in the norms and beliefs of the firm. Firms listed in Kenya restructure their capital structure to enhance shareholder and improve firm performance. Financial performance is enhanced as capita; restructuring increases efficiency of the firms. This shows that this theory is relevant for this study.

## **2.3 Determinants of Financial Performance of Listed Firms**

Various determinants influence financial performance. In this research the determinants will include capital restructuring, liquidity, firm size and tangibility of assets as discussed below;

### **2.3.1 Capital Restructuring**

Koh, Dai and Chang (2012) define capital restructuring is defined as the changing of the firm's capital structure based on the changing business environment and with the aim of funding the growth of a firm. Cascio (2012) defined capital restructuring as the change in the equity-debt mix when restructuring a firm. Bowman et al. (2016) indicated that capital restructuring in a firm is measured through the changes in debt to capital ratio over the years.



Research has shown that capital restructuring is a key determinant of financial performance of firms (Lal et al, 2013; Nazir & Alam, 2010). Inoue et al. (2010); and Kwaning, Churchill and Opoku (2014) found a positive relationship between capital restructuring and financial performance. However, Norazlan (2018) found a negative relationship. Oloyede and Sulaiman (2013); and Gupta (2017) found no relationship. This shows inconclusive research on the relationship between capital restructuring and financial performance.

### **2.3.2 Liquidity**

Liquidity relates to how assets easily assets are convertible to cash (Graham, 2010). Padachi (2016) recommends that firms need to balance their level of liquidity in order to enhance their financial performance. Firm liquidity has been established as a factor that affect firms financial performance (Almajali et al 2012).

Graham (2010) indicates that liquidity is measured through liquidity ratios. They relate to current ratio which is the ratio of current assets to current liabilities; and quick ratio, which is the ratio of current assets less inventories to current liabilities. The current ratio has been found to provide a more accurate assessment of liquidity. This makes the study adopt current ratio as a measure of liquidity in this research. Nyabwanga et al (2013) found a positive relationship between liquidity and financial performance. Kamau and Njeru (2016) found that liquidity had a negative effect on financial performance. Enekwe, Nnagbogu and Agu (2017), however, found no relationship between liquidity and financial performance.

### **2.3.3 Firm Size**

According to Ongore and Kusa (2013), firm size is number of assets which defines a firm's production ability. Niresh and Velnampy (2014) note that a firm which is large in size has lower production costs which in turn reduce cases of reduced financial performance. Big firms find themselves in a better position in the exploitation of economies of scale and more efficient than small firms. Firm size is measured in terms of its assets, employees or market share.

Empirically, firm size has an effect on financial performance (Babalola, 2013; Stella et al, 2014). An empirical study of Abdukadir (2016) established that firm size and firm financial performance relates positively. On the other hand, big firms face inefficiencies which in turn influence financial performance negatively. However, Niresh and Velnampy (2014) found that firm size had no relationship on the financial performance.

### **2.3.4 Tangibility of Assets**

Assets tangibility is defined as the level of assets used in a firms' operations (Kozak, 2011). The tangibility of assets measures the level of fixed assets in relation to the level of total assets in the firm. A firm with a high level of fixed asset performs better as it increases the firm's asset value in the future (Kozak, 2011). In this study, we will measure tangibility in terms of the fixed assets as a ratio of total assets.

Empirically, Hafiz (2011) established that asset tangibility had positive relationship with financial performance of studied firms. Naveed, Zulfqar and Ahmad (2011), however,

established a negative. Abbas, Bashir, Manzoor and Akram (2013) found that asset tangibility does not have a significant relationship with financial performance. This shows that the relationship between tangibility of assets and financial performance is inconclusive and needs to be researched further.

## **2.4 Empirical Studies**

This section gives the empirical research done on capital restructuring and financial performance. The studies by different authors are reviewed to show the empirical gap existing in the topic. The studies are both global and local to show the general status of the research on capital restructuring and financial performance.

### **2.4.1 Global Studies**

In Malaysia, Norazlan (2018) studied restructuring of listed firms in Bursa stock exchange and how it related to the firm's financial performance between 1990 and 2012. The research was based return on assets and equity of forty-seven firms that announced debt restructuring. Panel regression and descriptive analysis was done. Capital restructuring showed significant negative relationship with financial performance. This was shown by a significant regression coefficient between capital restructuring and financial ratios. The study was done listed firms that shows similarity to the current study. However, the study was done in the Bursa stock exchange while the current study was done in the Nairobi Securities Exchange.

In Japan, Inoue et al. (2010) studied post financial performance of commercial banks. It was based on the pre and post restructuring financial performance between 1990 and 2005. Eighty-nine banks were sampled. Descriptive research design was used. Panel data regression model was used to establish the relationship between variables. The findings showed no change in financial ratios after restructuring in the first three years. However, the ratio improved three years after capital restructuring.

In Nigeria, Oloyede and Sulaiman (2013) did a comparative analysis on financial performance before and after restructuring of listed firms. Financial and real sectors were targeted by the researcher. Ten banks were sampled and selected randomly. Data were collected from published financial reports of listed firms between 2000 and 2011. Descriptive and t testing was used in data analysis. It was found that capital restructuring significantly impacted on firm's financial performance in real sector but insignificant in financial sector. The study used t-testing while the current study used F-testing to test the significance of the model. The study was done for a 12-year period while the current study was done for a 10-year period.

In India, Gupta (2017) researched on debt restructuring and financial performance. Six firms that had restructured their debt in India were used in the study. Gupta examined ten ratios of financial performance three years before and after the restructuring. Data was collected from audited financial statements of individual firms. Descriptive statistics and t-testing were used for data analysis. Firm's debt restructuring did not change the financial ratios of the selected firms within the first 3 years after which they improved. The study focused on firms that

restructured their debt while the current study focused on firms that restructured both debt and equity. T-testing was used for significance while the current study will use F-test.

In Ghana, Kwaning, Churchill and Opoku (2014) assessed financial restructuring of banks and their influence on their financial performance. African development bank was used as the case. Primary and secondary data were collected. Interview schedules were used in primary data collection from the management. Secondary data was collected using a data sheet. Descriptive and correlation analysis was done to establish the relationship between variables. Capital restructuring influenced financial performance. Profitability ratios improved with capital restructuring. This study was done in the banking sector while the current study was done on listed firms. The study used both primary and secondary data while the current study used secondary data only.

#### **2.4.2 Local Studies**

In the commercial banking sector, Ongwae and Moronge (2016) did a research on restructuring and performance between 2011 and 2014. Forty-four banks were involved in the study. The research involved 462 employees from the head office selected through random sampling. data were collected through self administered questionnaires. Descriptive analysis was done. The findings showed that capital restructuring improved financial performance of the banks. The improvement, however, was felt two years after restructuring was done. This study focused on banks and used primary data. However, the current study will use all listed firms

and secondary data. The study was also done for a 5-year period while the current study focuses on a 10-year period between 2010 and 2019.

Osoro (2014) studied financial restructuring and financial performance of eleven commercial banks from 2008 to 2013. Listed banks within the six year period were involved in the research. Data were collected from published annual reports of the banks from the NSE. The study used a quantitative research design. Data was analyzed through descriptive statistics and multiple regression. T-test was done to show the significance of the model. The results showed that financial restructuring positively influenced financial ratios of commercial banks.

Using positivism philosophy, Kithinji (2017) studied restructuring and financial performance of commercial banks that restructured between 2002 and 2014. The study used both descriptive and causal research designs. Forty-four commercial banks were targeted for the study. Data were collected from published individual bank financial statements using collection schedule. Descriptive and inferential statistics were used in analysis. Restructuring was found to affect the financial ratios where they improved after the restructuring. This research was done only for the banks while the current study will include all listed firms. The study focused on a 12-year period while the current study was done on a 10-year period.

In commercial banks, Kithinji (2019) studied bank restructuring and financial performance. The research targeted forty-four banks from 2012 to 2014. The study involved 39 banks that had published financial reports for the period of study. Secondary data were collected for the study. The research involved descriptive statistics and multiple regression analysis. Findings

showed that capital restructuring was done by the banks. Findings further showed that capital restructuring positively influenced financial performance. This study focused only on commercial banks and assumed other firms listed at the NSE. The study focused on a 12-year period while the current study was done on a 10-year period.

For mobile service providers, Riany et. al (2012) reviewed restructuring and performance. The research was based on causal design. Four mobile service providers were targeted for the study. Ninety-six employees were sampled through stratified random sampling. The research was based both secondary and primary data. Questionnaires collected primary data from the employees. Data collection sheet was used to gather secondary data. The data was from annual reports. The research used descriptive statistics for analysis. The findings showed that capital restructuring led to increased profitability and firm value of mobile service providers. This study was done on mobile service providers with the current study focusing on listed firms. Both primary and secondary data was used while the current study was based purely on secondary data. Causal design was used while the current study was based on descriptive and cross-sectional design.

## **2.5 Conceptual Framework**

According to Sekeran and Bougie (2013), conceptual framework is the graphic representation of the variables on which the research is based. The independent variable was capital

restructuring while dependent variable was financial performance. Firm size controlled the relationship between the variables.

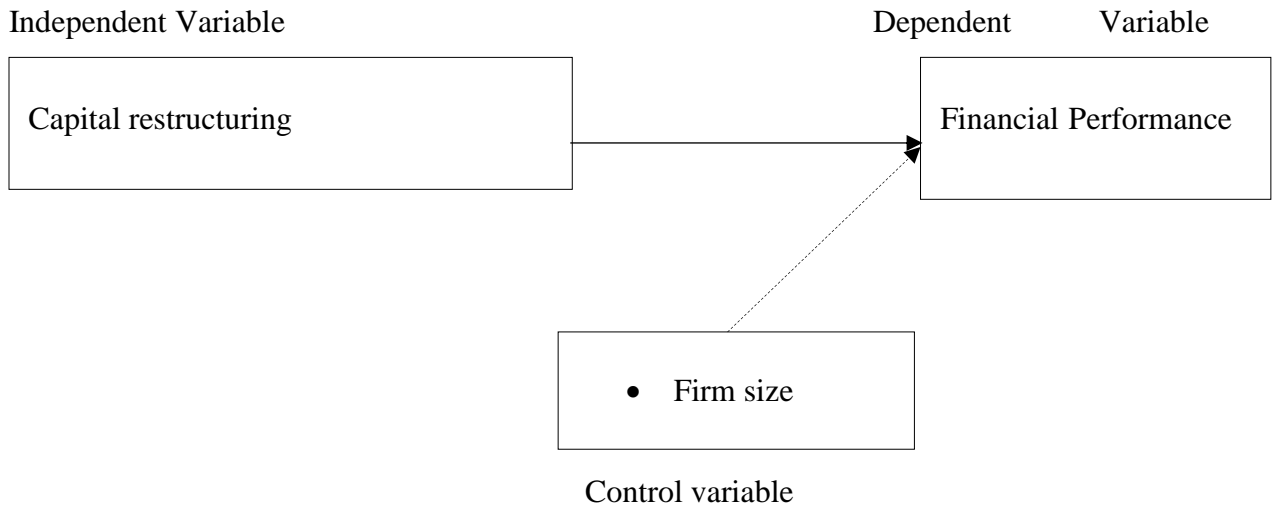


Figure 2.1: Conceptual framework

## 2.6 Summary of Literature Review

Throughout literature capital restructuring and financial performance was discussed. Empirically, despite the literature focusing on capital restructuring and financial performance, the studies have been done outside Kenya. These studies found inconclusive findings on the relationship between capital restructuring and financial performance. For example, Kwaning, Churchill and Opoku (2014) found a positive relationship; Norazlan (2018) found a negative relationship; while Gupta (2017) found no relationship. Local literature on capital restructuring and financial performance is limited studies focusing on organizational restructuring (Kithinji, 2017) other than capital restructuring or other firms like mobile service providers (Riany et. al, 2012) other than listed firms. This created a gap that which the study sought fill.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter gave the research methods that was adopted in the study. The methods were related to the population, data collection and data analysis.

#### **3.2 Research Design**

A research design is defined as the main strategy adopted in an empirical research to assimilate the study components logically and coherently (Cooper & Schindler, 2014). Descriptive design was adopted in this research. Groves (2014) describes a descriptive design as one that seek to make a description of variables and their relationship. The design enabled the researcher describe how the variables of the study (capital restructuring and financial performance) related to each other hence provided guidance in undertaking the research.

#### **3.3 Population of The Study**

Target population is a collection of individuals or firms from which a sample is selected (Kombo & Tromp, 2014). All firms in Kenya listed at the NSE were targeted. According to NSE (2019), forty-eight (48) firms were listed at the NSE which formed the sampling frame of this research. Target population was shown by Appendix I. Firms not listed within the period

of study were excluded. The Forty-eight firms listed at the NSE between 2010 and 2019 were involved in the study. All the forty-eight firms were involved. This ensured that the researcher had sufficient data points for analysis. Unbalanced panel data was used for the 48 firms for the 10-year period. This gave a total of 480 data points.

### **3.4 Data Collection**

According to Langkos (2015), data collection is the gathering of data based on a phenomenon. In this study, secondary data collected from annual financial reports of listed firms was used. The study involved firms listed between 2010 and 2019 at the NSE. Financial ratios were calculated from the data in order to address the research objective. Both cross-sectional and time series data was used in this study. This shows that this study was based on panel data.

### **3.5 Diagnostic Tests**

Diagnostic tests are done to show the relevance of the analysis model to the data. In this research, the diagnostic tests will involve the test for multicollinearity, normality, heteroscedasticity and autocorrelation.

#### **3.5.1 Multicollinearity Test**

According to Kumari (2018), the existence of a linear relationship among the independent variables is called multicollinearity. Multicollinearity can cause large forecasting error and make it difficult to assess the relative importance of individual variables in the model. When

there is a perfect linear relationship among the predictors, the estimates for a regression model cannot be uniquely computed. The term collinearity implies that two variables are near perfect linear combinations of one another.

Multicollinearity is described as the situation in which a linear relationship exists among the predictor variables (Kumari, 2018). In this study, multicollinearity was tested using variance inflation factor. In this test, the data was assumed to have multicollinearity issues where the VIF is above ten or have a tolerance value above two. If the value of VIF is more than 10 or tolerance is more than 2, we could say that the model is suffering from multicollinearity. A variance Inflation Factor more than 10 would indicate a high level of multicollinearity.

### **3.5.2 Normality Test**

One of the assumptions of the classical linear regression model is that the error term must normally be distributed with zero mean and a constant variance. The error term is used to capture all other factors which affect dependent variable but are not considered in the model. However, it is thought that the omitted factors have a small impact and at best random. For ordinal least square (OLS) to be applied, the error term must be normal (Kombo, 2014). Non-normally distributed variables can distort relationships and significance tests. In this study normal distribution of data was tested by use of Shapiro Wilk Test. The Shapiro–Wilk test is a test of normality in frequentist statistics.

Normality test is done to establish whether variable data is normally or abnormally distributed based on the error term (Bryman, 2016). It is assumed that the data pool is under normal distribution under the null hypothesis. Where the significance value was below the recommended alpha value (0.05), the researcher rejected the hypothesis and conclude that there was no normal distribution in the data. The hypothesis is nor rejected where the significance value was above the alpha value (U-Islam, 2011).

### **3.5.3 Heteroscedasticity Test**

Heteroscedasticity test is done to establish whether the error term variance was constant over time. Homoscedasticity means a study having the same scatter. The test was done to test the variance in residuals in regression model to use in the study. One basic assumption of OLS is that over time the error term should vary.

Heteroscedasticity test checks on the constant nature of an error term variance (Liu & Okui, 2013). Homoscedasticity assumes that the variance of the error term is constant over time. Heteroscedasticity assumed that the error term is not constant over time. Breusch Pagan Test was used to test for heteroscedasticity in the model data.

### **3.5.4 Autocorrelation Test**

Autocorrelation exists when the error term in a regression model are highly correlated over time. Autocorrelation for performance was conducted. Durbin Watson statistic was used to test autocorrelation. The higher order test assumed absence of lower order autocorrelation.

Where the value is above 0.05, the null hypothesis was not rejected hence there was no correlation between the observation errors.

### **3.6 Data Analysis**

Data analysis relates to data extraction, compilation and modelling with the objective of getting relevant information (Brians, 2011). Data was analysed using multiple regression, correlation and descriptive analysis. The correlation analysis used Pearson's correlation coefficient. The factors were calculated on an annual basis. Average data per firm was used in analysis. The analysis was done by the use of STATA 13.

#### **3.6.1 Analytical Model**

The study used panel data regression model that took the form of:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \varepsilon$$

Where:

$Y_{it}$  was financial performance of as measured by ROA of firm,  $i$  at time  $t$ ;  $\alpha$  is constant term;  $\beta_1, \beta_2$  were regression coefficients;  $X_1$  was capital restructuring as measured by the change in debt to capitalization ratio of firm,  $i$  at time  $t$ ;  $X_2$  was firm size as measured by log of total assets of firm,  $i$  at time  $t$ ;  $\mu =$  error term.

### 3.6.2 Significance Tests

For this study, significance testing was done with the use of Anova. This involved the use of f-statistics. This checked whether the model fits the study variables and data. The study was based on the 95% confidence level.

### 3.7 Operationalization of Study Variables

Table 3.1: Operationalization Framework

Variable Type	Variable	Indicators	Measurement
Dependent	Financial performance	Return on assets	Net profit before Tax/Total Assets
Independent	Capital restructuring	changes in debt to capitalization ratio	(debt to capitalization ratio in the current year - debt to capitalization ratio in previous year)/ debt to capitalization ratio in the previous year $(DR_1 - DR_0)/DR_0$
Control	Firm size	Total assets	log of total assets

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION OF FINDINGS

#### 4.1 Introduction

This chapter presents the results obtained from the data analysis. The analysis was guided by the objectives. Data analysis was done in the chapter. The data was analyzed using Stata version 13 which assisted in generating the statistics. Tabular presentation was used in this study. The following abbreviations as used in the data analysis and were common in the whole chapter were used respectively. In this analysis, ROA represents Y which is the measure of financial performance. Further,  $X_1$  stands for capital restructuring as measured by debt to total capitalization ratio while  $X_2$  represents firm size as measured by log of assets.

#### 4.2 Descriptive Statistics

Table 4.2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	480	15.48197	6.053321	4.8519	32.0892
X1	480	195.2945	127.0217	5.156	415.5736
X2	480	16.89228	2.409154	12.23921	20.624

From table 4.2, findings showed the descriptive statistics of the variables. The statistics was generated from 48 data points. Return on assets as a measure of financial performance showed a mean of 15.48% for the listed firms between 2010 and 2019. The minimum ROA for the

period between 2010 and 2019 was 4.85%. For the period, the firms showed a maximum ROA of 32.09%. Financial performance across the listed firms between 2010 and 2019 showed a standard deviation of 6.05% showing low variation.

For the period between 2010 and 2019, change in debt to capitalization ratio (capital restructuring) showed a mean of 195.29% for the listed firms. Standard deviation for the listed firms across the firms was 127.0%. This shows that debt to capitalization ratio for the listed firms varied greatly between 2010 and 2019. The firms showed a minimum ratio of 5.16% with a maximum of 415.57%. Firm size as measured by log of assets was used as the control variable. Firm size of listed firms showed an average of 16.89 between 2010 and 2019. The standard deviation was 2.41 for the period. The firms showed a minimum of 12.24 and a maximum of 20.62 between 2010 and 2019.

### 4.3 Diagnostic Tests for Regression

#### 4.3.1 Multicollinearity Test

Table 4.3: Multicollinearity Test

Variable	VIF	1/VIF
X1	1.01	0.990895
X2	1.09	0.917431
Mean VIF	1.05	

Multi-collinearity of the data used in the research was tested. The researcher used variance inflation factor (VIF) to carry out the multicollinearity diagnostics to check on the level at



which the variance is inflated. This was done on listed firms in Kenya based on the period between 2010 and 2019. From table 4.3, the VIF values were close to 1 with the tolerance values (1/VIF) close to 95%. This shows that variance of the study variables had been inflated at a very low extent. The mean VIF is 1.18 shows that the variance was inflated to a very low extent in the model data. Hence, multicollinearity is not a problem for the data used in the analysis.

### 4.3.2 Normality Test

Table 4.4: Normality Test

Shapiro-Wilk W test for normal data					
Variable	Obs	W	V	z	Prob>z
ROA	480	0.98464	4.982	3.853	0.00006
X1	480	0.94321	18.414	6.990	0.00000
X2	480	0.98260	5.643	4.152	0.00002

The study sought to test for normality of the data using Shapiro-Wilk test. From table 4.4, the variables displayed a p-value which was less than the critical 0.05 value. Hence, we reject the null hypothesis that data is normally distributed and assume the alternative hypothesis. This shows that the data for the variables is not normally distributed.

### 4.3.3 Heteroscedasticity Test

Figure 4.2: Heteroscedasticity Test

```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of ROA

chi2(1)      =    0.00
Prob > chi2  =    0.9530

```

From the findings shown by figure 4.2, the p-value is more than 0.05. Hence, we cannot reject the null hypothesis that there is constant variance in our data. Hence, the data used in analysis has low levels of heteroscedasticity which is not a problem.

#### **4.3.4 Autocorrelation Test**

Figure 4.3: Autocorrelation Test

```

Durbin Watson d-statistic (    2,    290) = 1.707

```

Figure 4.3 shows the findings on the autocorrelation test based on Durbin Watson test for the data from listed firms between 2010 and 2019. The data displayed a Durbin Watson statistic of 1.707. The value is close to 2 which shows that there is low autocorrelation across the data. Thus, it can be determined that were independent due to the fact that residuals were autonomous and there was no autocorrelation.

#### **4.4 Regression Analysis**

The study sought to establish the cause-effect relationship between capital restructuring and financial performance of listed firms in Kenya between 2010 and 2019. The study used cross sectional data model in form of a multiple regression. This section presents the findings on the

regression analysis based on the random impact model. The findings are shown by table 4.5 and 4.6.

Table 4.5: Model Summary

Source	SS	df	MS	Number of obs	=	480
				F(2, 477)	=	9.58
Model	115.64243	2	57.8212151	Prob > F	=	0.0000
Residual	17436.2069	477	36.553893	R-squared	=	0.8166
				Adj R-squared	=	0.8158
Total	17551.8494	479	36.6426918	Root MSE	=	1.046

Table 4.5 showed an R squared value of 0.8166. This shows that 81.66% of the change in ROA of Kenyan listed firms between 2010 and 2019 was due to change in debt to capitalization ratio as a measure of capital restructuring and firm size at 95% confidence interval. The remaining 18.34% change in ROA of the firms was accounted by other factors other than changes in debt to capitalization ratio and firm size.

From table 4.5, the model summary showed a significant F-statistic of 9.58 which is greater than the critical F-statistics of 3.014. This indicates that the regression model fitted the data and was the best model to use for analysis. The model showed a significant value of 0.000 which was less than 0.05. This shows that changes in debt to capitalization ratio and firm size had a significant combined impact on ROA of listed firms in Kenya between 2010 and 2019.

Table 4.6: Regression Coefficients

ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
X1	.27962	.1021848	2.74	0.006	.078840	.480402
X2	-.4981656	.1651915	-3.02	0.003	-.8226956	-.173518
_cons	18.9513	1.971316	9.61	0.000	15.07776	22.82483

From table 4.6, the findings showed that holding debt to total capitalization ratio of listed firms in Kenya in the period between 2010 and 2019 to a constant zero, ROA would stand at 18.9513. Further, a unit increase in the change in debt to total capitalization ratio would increase ROA by 0.27962. A unit increase in firm size in terms of assets would decrease ROA of listed firms by 0.4982 in the period. The variables displayed a significant impact on the ROA as the p values were less than 0.05.

#### 4.5 Correlation Analysis

Correlation analysis was done to establish the relationship between capital restructuring and financial performance of listed firms in Kenya between 2010 and 2019.

Table 4.7: Correlation Analysis

	ROA	X1	X2
ROA	1.0000		
X1	0.4177	1.0000	
X2	-0.2601	0.0509	1.0000

From the correlation table 4.7, capital restructuring displayed a positive relationship with return on assets as a measure of financial performance as shown by correlation coefficient of 0.4177. Firm size showed a negative relationship with return on assets as shown by correlation

coefficient of -0.2601. The coefficients were significant at 95% confidence level as the coefficients were above the critical correlation coefficient of 0.089.

## **4.6 Discussions**

From the findings, the model showed that capital restructuring caused more than 50% change in ROA of Kenyan listed firms between 2010 and 2019. Changes in debt to capitalization ratio and firm size had a significant combined impact on ROA of listed firms in Kenya between 2010 and 2019. From the regression, capital restructuring was found to have an effect on financial performance of listed firms as measured by ROA. The findings concur with those of Oloyede and Sulaiman (2013); and Kwaning, Churchill and Opoku (2014) who found that capital restructuring significantly impacted on firm's financial performance.

The findings from the correlation analysis showed that capital restructuring had a positive effect on financial performance (ROA) significant at the 95% confidence level. The findings differ with those of Norazlan (2018) who found that capital restructuring showed significant negative relationship with financial performance. Inoue et al. (2010) showed no relationship between capital restructuring and financial performance.

Firm size showed an effect on the financial performance of the listed firms. The findings concur with that of Babalola (2013) who found that firm size has an effect on financial performance. The study found that increase in firm size in terms of assets would decrease ROA of listed firms. From the correlation analysis, firm size showed a significant negative

relationship with financial performance (ROA). The findings differ with those of Abdukadir (2016) who established that firm size and firm financial performance relates positively. Niresh and Velnampy (2014) found that firm size had no relationship on the financial performance.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter gives the summary of findings, conclusions and recommendations based on the objective of the study.

#### **5.2 Summary**

From the descriptive analysis, return on assets showed a of 15.48% for the listed firms between 2010 and 2019. Financial performance across the listed firms between 2010 and 2019 showed a standard deviation of 6.05% showing low variation across the firms. The minimum ROA for the period between 2010 and 2019 was 4.85% with a maximum of 32.09%. For the period between 2010 and 2019, change in debt to capitalization ratio (capital restructuring) showed a mean of 195.29% for the listed firms. Standard deviation for the listed firms across the firms was 127.0%. The firms showed a minimum ratio of 5.16% with a maximum of 415.57%. Firm size of listed firms showed an average of 16.89 between 2010 and 2019 with a standard deviation of 2.41 for the period.

From the regression analysis, the data showed an R squared value of 0.7785 an indication that capital restructuring had a 77.85% change in ROA of Kenyan listed firms between 2010 and 2019. The model summary showed a significant F statistic an indication that the regression

model fitted the data and was the best model to use for analysis. The significance below 0.05 indicated that changes in debt to capitalization ratio had a significant combined impact on ROA of listed firms in Kenya between 2010 and 2019 controlled by firm size.

From the regression coefficients, the findings showed that an increase in debt to total capitalization ratio would increase ROA. An increase in firm size in terms of assets would decrease ROA of listed firms in the period between 2010 and 2019. From the correlation analysis, capital restructuring displayed a positive relationship with return on assets as a measure of financial performance. Firm size showed a negative relationship with return on assets. The coefficients were significant at 95% confidence level. This shows that capital restructuring positively relates to financial performance of listed firms.

### **5.3 Conclusions**

The study found that debt to capitalization ratio had a significant effect on return on assets of listed firms between 2010 and 2019. Hence, the study concludes that capital restructuring has a significant effect on financial performance of listed firms in Kenya. The findings showed that debt to capitalization ratio had a significant positive relationship with ROA. This leads to the conclusion that capital restructuring significantly and positively relates with the financial performance of listed firms in Kenya.

Firm size as a control variable has a significant effect on ROA of listed firms in Kenya. This leads to the conclusion that firm size has a controlling effect on the relationship between



capital restructuring and financial performance of listed firms in Kenya. However, firm size showed a negative correlation coefficient with ROA. This led to the conclusion that firm size has a negative controlling effect on the relationship between capital restructuring and financial performance of listed firms in Kenya.

#### **5.4 Policy Recommendations**

The findings showed that capital restructuring has a positive relationship with financial performance of listed firms. There is need for listed to regularly restructure their capital in order to improve their financial ratios. The firms should also ensure that they have an optimal balance between debt and equity to ensure an effective capital structure for improved performance.

The listed firms should also put relevant controls on the use of capital and other forms of equity regardless of the statutory requirements so that the financial performance of the firm is not jeopardized. There is need for the Nairobi Securities Exchange to recommend capital restructuring of the listed firms to improve their financial performance. The Capital Market Authority, should give individual firms the freedom to identify the best strategies to use in restructuring their capital.

#### **5.5 Recommendations for further research**

A similar study is recommended on capital restructuring and financial performance on non-listed firms for comparison of results. A study can be done on other factors influencing financial performance of listed firms other than capital restructuring. A similar study on a different period like 5 years is recommended.

## **5.6 Limitations Of The Study**

The study was based on 10-year study period of 2010 to 2019. This means that the findings may differ where the analysis is done based on a different period like 5 years. The study was limited by the inability of the researcher to assess the credibility of the data from the published reports. This is despite the data having been sought from financial reports and the Nairobi Securities Exchange. The study was also limited to the capital restructuring in listed firms which may give different results if done on other firms.

## REFERENCES

- Abdukadir, B. S. A. (2016). The Effect of Leverage, Liquidity, and Firm Size on Financial Performance of Listed Non-Financial Firms in Kenya. *Journal on Corporate Finance*, 3(4), 43-45.
- Adams, G. R., & Mehran, J. D. (2015). *Understanding research methods*. Boston: Longman Publishing.
- Amalendu B, Somnath, M. & Gautam, R. (2011). Financial Performance Analysis: A Case Study. *Current Research Journal of Social Sciences*, 3(3), 269-275
- Babalola, Y. A. (2013). The effect of firm size on firm's profitability in Nigeria. *Journal of economics and sustainable development*, 4(5), 90-94.
- Ball, R. J. (2017). *Inflation and the Theory of Money*. Piscataway, New Jersey: Transaction Publishers.
- Bealing, W., Riordan, D., & Riordan, M. (2011). Institutional Theory in College Restructuring: Myth or Reality? *Journal of Case Studies in Education*, 2(5), 1-13.
- Berk, B. & DeMarzo, M. (2017). *Corporate finance*. Boston, Mass: Pearson Addison Wesley.
- Bowman, E. H., Singh, H., Useem, H., & Badhury, R. (2016). When Does Restructuring Improve Economic Performance? *California Management Review*, 3(2), 468-79.

- Brealey, R. A., Myers, S. C., Allen, F., & Mohanty, P. (2012). *Principles of corporate finance*. Tata McGraw-Hill Education.
- Brians, C. L. (2011). *Empirical Political Analysis: Quantitative and Qualitative Research Methods* (8<sup>th</sup> ed.). Boston, MA: Longman.
- Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press.
- Cadez, S. & Guilding, C. (2018). An exploratory investigation of an integrated contingency model of strategic management accounting. *Account. Organ. Soc.*, 33(7/8), 836-863.
- Chang, C. L., Hsu, H. K., & McAleer, M. (2013). Is small beautiful? Size effects of volatility spillovers for firm performance and exchange rates in tourism. *The North American Journal of Economics and Finance*, 26(3), 519-534.
- Chege, C. W. & Kimencu, L. (2018). Restructuring strategies and the performance of commercial banks in Kenya: A case of Kenya Commercial Bank. *International Academic Journal of Human Resource and Business Administration*, 3(4), 270-290
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods*. New York: McGraw-Hill.
- Enekwe, I., Nnagbogu, E. & Agu, C. (2017). Effect of Liquidity Risk on Financial Performance of Selected Quoted Commercial Banks in Nigeria. *Journal of Global Accounting*, 5(1), 279-286.

- Gilson, S. C. (2010). *Creating value through corporate restructuring: Case studies in bankruptcies, buyouts, and breakups*. Netherlands: Wiley.
- Gowing, M., Kraft, J. & Quick, J. (2018). *The New Organizations Reality: Downsizing, Restructuring and Revitalization (3<sup>rd</sup> ed.)*. USA: American Psychological Association Publishers.
- Greene, W. (2012). *Econometric Analysis (7<sup>th</sup> ed.)*. Upper Saddle River, NJ: Prentice Hall.
- Groves, R.M (2014). *Survey Methodology (3<sup>rd</sup> ed.)*. Hoboken, New Jersey: John Wiley & Sons.
- Gupta, V. (2017). Corporate Debt Restructuring and its Impact on Financial Performance. *International Journal of Engineering Technology, Management and Applied Sciences*, 5(2), 160-176.
- Inoue, K., Uchida, K., & Bremer, M. (2010). Post-restructuring performance in Japan. *Pacific-Basin Finance Journal*, 18(5), 494-508.
- Islam, J. & Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African Journal of Business Management*, 6 (15), 5159-5164.
- Javed, S. M., & Jahanzeb, A. (2012). A critical review of capital structure theories. *Information Management and Business Review*, 4(11), 553-557.

- Javed,B. & Akhtar,S. (2012). Interrelationships between capital structure and financial performance, firm size and growth: Comparison of industrial sector in KSE: *European Journal of Business and Management*, 4(15), 148-157.
- Kamau, F., & Njeru, A. (2016). Effect of Liquidity Risk on Financial Performance of Insurance Companies Listed at the Nairobi Securities Exchange. *International Journal of Science and Research*, 5(10), 867-872.
- Kiarie, C. N. (2014). Impact of restructurings on financial performance of firms listed at the Nairobi Securities Exchange (MBA Thesis). University of Nairobi.
- Kithinji, A. (2019). The impact of bank restructuring on financial performance controlled by customer deposits: An empirical investigation of commercial banks in Kenya. *International Journal for Innovative Research in Multidisciplinary*, 5(1), 13-19.
- Kithinji, A. M. (2017). Bank Restructuring, Financial Services, Firm Characteristics and Financial Performance of Commercial Banks in Kenya (Doctoral dissertation). University of Nairobi.
- Koh, S., Durand, R. B., Dai, L., & Chang, M. (2015). Financial distress: Lifecycle and corporate restructuring. *Journal of Corporate Finance*, 33(2), 19-33.
- Kombo, D., & Tromp, D. (2014). *Proposal and thesis writing: An introduction*. Nairobi: Pauline's publications.

- Kratochvilova, H. (2011). *Restructuring, recovery and salvage company (5<sup>th</sup> ed.)*. Prague: Prospektrum Press.
- Kraus A, Litzberger R (1973) A state-preference model of optimal financial leverage. *Journal of Finance*, 28(5), 911–922.
- Kumari, S. (2018). Multicollinearity: estimation and elimination. *Journal of Contemporary Research in Management*, 1(1), 87-95.
- Kwaning, C. O., Churchill, R. Q., & Opoku, A. K. (2014). The Impact of Organizational Restructuring on the Financial Performance of Public Banks: A Post Restructuring Assessment of Agricultural Development Bank, Ghana. *Research Journal of Finance and Accounting*, 5(16), 106-112.
- Lal, D., Pitt, C.D., & Beloucif, A. (2013). Restructuring in African telecommunications. *Africa Business Review*, 13(3), 152-158.
- Langkos, S. (2015). *Data collection method and tools*. Retrieved from 10.13140/2.1.3621.4083
- Liu, Q., & Okui, R. (2013). Heteroscedasticity. *The Econometrics Journal*, 16(3), 463-472.
- Mario, D. (2014). *Bank restructuring and the economic recovery; The European Central Bank Euro system* (Speech Presentation Ceremony). Schumpeter Award, Oesterreichische National Bank, Vienna.

- Nazir, M., & Alam, A. (2010). The Impact of Financial Restructuring on the Performance of Pakistani Banks: A DEA Approach. *The IUP Journal of Applied Finance*, 16(1), 71-86.
- Niresh, A., & Velnampy, T. (2014). Firm Size and Profitability: A Study of Listed Manufacturing Firms in Sri Lanka. *International Journal of Business and Management*, 9(4), 57-64.
- Norazlan, A. (2018). Corporate restructuring and performance in Malaysia. *Journal Pengurusan*, 27(8), 129-141.
- Odula, E. O. (2015). The impact of restructuring on the performance of financial institutions in Kenya (MSC Thesis). University of Nairobi.
- Oloyede, J. A. & Sulaiman L. A. (2013). A comparative analysis of post restructuring performance of firms in financial and real sectors in Nigeria. *Asian Journal of Empirical Research*, 3(1),62-73
- Omran, M. & Pointon, J. (2014). Dividend policy, trading characteristics and share prices: Empirical evidence from Egyptian firms. *International Journal of Theoretical and Applied Finance*, 7(2), 121-133
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International journal of economics and financial issues*, 3(1), 237.



- Ongwae, M.N., & Moronge, M. (2016). Influence of organizational restructuring on performance of commercial banks in Kenya: A case of Kenya Commercial Bank. *The strategic Journal of Business and change management*, 3(26), 571-594.
- Osoro, P. M. (2014). The impact of financial restructuring on the financial performance of commercial banks in Kenya (MBA project). University of Nairobi.
- Reid, G.C., & Smith, J.A. (2010). The impact of contingencies on management accounting system development. *Manage. Account. Res.*, 11(4), 427-450.
- Riany, C., Musa, G., Odera, O., & Okaka, O. (2012). Effect of restructuring on organization performance of mobile phone service providers. *International Review of Social Sciences and Humanities*, 4(1),198-204.
- Robbins, S. P., & Coulter, M. (2016). *Management (9<sup>th</sup> ed.)*. London: Prentice Hall
- Roberts, M. R. (2017). Surprise and sense-making. What newcomers experience when entering unfamiliar organizational settings. *Administrative Science Quarterly*, 25(2), 226-251.
- Rogovsky, N., Ozoux, P., Esser, D., & Broughton, A. (2015). *Restructuring for corporate success: A socially sensitive approach*. Geneva: International Labour Office.
- Scott, W. (2004). Institutional theory. In *Encyclopedia of Social Theory*, George Ritzer, ed. Thousand Oaks, CA: Sage.

Sisaye, S. (2016). *The ecology of management accounting and control systems: implications for managing teams and work groups in complex organizations*. London: Praeger Publishers.

Toma, J. D., Dubrow, G., & Hartley, M. (2015). Understanding institutional culture. *ASHE Higher Education Report*, 31(2), 39-54.

Ul-Islam, T. (2011). Normality testing-A new direction. *International Journal of Business and Social Science*, 2(3), 201-13.

## APPENDICES

### Appendix I: Firms Listed in Kenya

Firms		Year	
Energy and Petroleum			
1	KenGen	2006	
2	KenolKobil Ltd	1959	
3	Kenya Power Ltd	1972	
4	Total Kenya Ltd	1988	
5	Umeme Ltd	2012	Excluded
Insurance			
6	Britam Holdings	2011	Excluded
7	CIC Group Ltd	2012	Excluded
8	Jubilee Holdings Ltd	1984	
9	Kenya Re	2006	
10	Liberty Kenya Holdings Ltd	2007	
11	Sanlam Kenya	1963	
Investment			
12	Centum Investment	1977	
13	Home Afrika	2013	Excluded

14	Kurwitu Ventures Ltd	2014	Excluded
15	Olympia Capital Ltd	1974	
16	Trans-Century Ltd	2011	Excluded
Investment Services			
17	Nairobi Securities Exchange	2014	Excluded
Manufacturing and Allied			
18	B.O.C Kenya Ltd	1969	
19	British American Tobacco Kenya	1969	
20	Carbacid Investments	1972	
21	East African Breweries Ltd	1972	
22	Flame Tree Group Holdings	2015	Excluded
23	Kenya Orchards Ltd	1959	
24	Mumias Sugar Co. Ltd	2001	
25	Unga Group Ltd	1971	
Telecommunication			
26	Safaricom Ltd	2008	
Real estate investment trust			
27	Stanlib Fahari I-Reit	2015	Excluded
Exchange Traded Funds			
28	Barclays New Gold	2017	Excluded

Agricultural			
29	Eaagads Ltd	1972	
30	Kakuzi Plc	1951	
31	Kapchorua Tea Co. Ltd	1972	
32	Limuru Tea Co. Ltd	1967	
33	Sasini Ltd	1965	
34	Williamson Tea Kenya Ltd	1972	
Automobiles & Accessories			
34	Car & General (K)	1950	
Banking			
35	Barclays Bank of Kenya Ltd	1986	
36	Diamond Trust Bank Kenya Ltd	1972	
37	Equity Group Holdings Ltd	2006	
38	HF Group Ltd	1992	
39	I & M Holdings Ltd	2013	Excluded
40	KCB	1989	
41	National Bank of Kenya Ltd	1994	
42	NIC Bank Ltd	1971	
43	Stanbic Holdings	1970	
44	Standard Chartered Bank Kenya Ltd	1988	

45	The Co-operative Bank of Kenya Ltd	2008	
Commercial and Services			
46	Atlas African Industries Ltd	2014	Excluded
47	Deacons East Africa	2016	Excluded
48	Eveready East Africa Ltd	2006	
49	Express Kenya Ltd	1978	
50	Kenya Airways Ltd	1996	
51	Longhorn Publishers Ltd	2012	Excluded
52	Nairobi Business Ventures Ltd	2016	Excluded
53	Nation Media Group Ltd	1973	
54	Sameer Africa Ltd	1994	
55	Standard Group Ltd	1954	
56	TPS Eastern Africa Ltd	1997	
57	Uchumi Supermarket Ltd	1992	
58	WPP Scangroup Ltd	2006	
Construction & Allied			
59	ARM Cement	1997	
60	Bamburi Cement Ltd	1970	
61	Crown Paints Kenya Ltd	1992	
62	E. A. Cables Ltd	1973	

63	E.A. Portland Cement Co. Ltd	1972	
----	------------------------------	------	--

## Appendix II: Data Collection Schedule

Year	Total Assets	Current Assets	Fixed Assets	Non-current Liabilities	Total Capital	Net Income	Current Liabilities
	Kshs.	Kshs.	Kshs.		Kshs.	Kshs.	Kshs.
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							