

**WORKING CAPITAL FINANCING, FINANCIAL FLEXIBILITY AND  
FINANCIAL PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT  
NAIROBI SECURITIES EXCHANGE, KENYA**

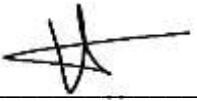
**BY  
VICTOR OMONDI OUMA**

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF  
DEGREE OF MASTER OF BUSINESS ADMINISTRATION, FACULTY  
OF BUSINESS AND MANAGEMENT SCIENCE, UNIVERSITY OF  
NAIROBI**

**NOVEMBER, 2022**

## DECLARATION

This research project report is my original work which to the best of my knowledge has not been submitted for examination in any other institution.

SIGNED  Date 22<sup>nd</sup> November 2022

**VICTOR OMONDI OUMA**  
**D61/79493/2015**

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

SIGNED  Date 22<sup>nd</sup> November 2022

**DR. NIXON OLUOCH OMORO**  
**SENIOR LECTURER,**  
**FACULTY OF BUSINESS & MANAGEMENT RESEARH,**  
**UNIVERSITY OF NAIROBI**

## **DEDICATION**

Elizabeth Akinyi for selfless plus special backing towards this academic work.

## **ACKNOWLEDGEMENT**

Working on this Research Report was an incredible achievement! Special thanks to everyone whose previous academic work build this study literature with appropriate referencing.

Overwhelming appreciation to my Research Supervisor Dr. Nixon Omoro for your valuable contributions towards the success of this Research.

I salute Mr. Jeff Oloo and Mr. Daniel Awuondo for your valuable support across my MBA study Journey.

Lots of thanks to my UON Lecturers and School of Business and Library staff, especially Mr. Samuel Owino for the overwhelming assistance throughout my study period.

Finally to God for the gift of Life that enable me to accomplish the compilation of this academic research report

# TABLE OF CONTENT

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iv</b>
<b>LIST OF FIGURES</b> .....	<b>vii</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>LIST OF ABBREVIATIONS</b> .....	<b>ix</b>
<b>ABSTRACT</b> .....	<b>x</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study.....	1
1.1.1 Working Capital Financing .....	2
1.1.2 Financial Flexibility.....	3
1.1.3 Financial Performance .....	3
1.1.4 Working Capital Financing, Financial Flexibility and Financial Performance.....	4
1.1.5 Non-financial Entities Quoted at Nairobi Securities Exchange, Kenya.....	5
1.2 Research Problem.....	6
1.3 Research Objectives .....	8
1.4 Value of the Study.....	9
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>10</b>
2.1 Introduction .....	10
2.2 Theoretical Literature Review.....	10
2.2.1 Risk Return Trade-off Theory .....	10
2.2.2 Resource Based Theory .....	11
2.2.3 Agency Theory .....	12
2.3 Empirical Literature Review .....	12
2.4 Summary of Literature Review and Knowledge Gap.....	14

2.5 Conceptual Framework .....	14
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>16</b>
3.1 Introduction .....	16
3.2 Research Design .....	16
3.3 Target Population .....	16
3.4 Data Collection.....	16
3.5 Data Analysis .....	17
3.5.1 Analytical Model .....	17
<b>CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSION.....</b>	<b>19</b>
4.1 Introduction .....	19
4.2 Descriptive Statistics .....	19
4.3 Correlational Analysis.....	21
4.4 Regression Analysis .....	22
4.4.1 Relationship between Working Capital Financing and Return on Asset. ....	22
4.4.2 Moderating impact of Financial Flexibility on linkage of Working Capital Financing with Return on Asset. ....	24
4.5 Discussion of Findings .....	28
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>31</b>
5.1 Introduction .....	31
5.2 Summary of Findings .....	31
5.3 Conclusion of the Study .....	32
5.4 Recommendations of the Study .....	33
5.5 Limitations of the Study .....	34
5.6 Propositions for further Research.....	35
<b>REFERENCES.....</b>	<b>36</b>
<b>APPENDICES .....</b>	<b>41</b>
Appendix I: Non-Financial Firms Listed at NSE, Kenya .....	41
Appendix II: Secondary Data Gather Form .....	42

## LIST OF FIGURES

Figure 2.1: Conceptual Model .....	15
Figure 4.1: Mean Trend of dependent variable (ROA).....	21

## LIST OF TABLES

Table 4.1 Descriptive Statistics of Study Variables.....	19
Table 4.2 Pearson Correlation of Variables.....	21
Table 4.3: Model Summary of Relationship between WCF and ROA.....	23
Table 4.4: ANOVA of the linkage between WCF and ROA.....	23
Table 4.5: Coefficient of linkage of WCF and ROA .....	24
Table 4.6: Model Summary of moderating impact of financial flexibility on WCF and ROA....	25
Table 4.7: ANOVA of moderating impact of financial flexibility on WCF and ROA.....	26
Table 4.8: Coefficients of moderating impact of financial flexibility on WCF and ROA.....	27



## LIST OF ABBREVIATIONS

<b>CA:</b>	Current Asset
<b>CCC:</b>	Cash Conversion Cycle
<b>CF:</b>	Cash Flow
<b>CH:</b>	Cash Holding
<b>CL:</b>	Current Liability
<b>CMA:</b>	Capital Markets Authority
<b>GMMT:</b>	Generalized Method of Moment Technique
<b>NSE:</b>	Nairobi Stock Exchange
<b>OPM:</b>	Operating Profit Margin
<b>ROA:</b>	Return on Assets
<b>ROE:</b>	Return on Equity
<b>WCF:</b>	Working Capital Financing
<b>WCM:</b>	Working Capital Management
<b>SPSS:</b>	Statistical Package for Social Sciences

## ABSTRACT

Working Capital is central to daily operations of every business. Working Capital Financing adopted by a firm take either Aggressive (where ratio is above 0.5) or Conservative (where ratio as below 0.5). The study explored effect of Working Capital Financing plus financial flexibility on financial performance of non-financial entities quoted at Nairobi Securities Exchange, Kenya. First study objective was to establish link of Working Capital Financing with financial performance of non-financial entities quoted at Nairobi Securities Exchange. Second study objective was to determine moderating impact of financial flexibility on linkage of Working Capital Financing with financial performance of non-financial entities quoted at Nairobi Securities Exchange. Study was anchored mainly on Risk Return Trade-off Theory supported by Resource based Theory plus Agency Theory. Study adopted correlation research design. The Secondary panel data for 31 non-financial entities were gathered for five years, resulting in 155 firm-year end observations. The data were analyzed by descriptive statistics, Pearson correlation, panel data regression to ascertained linkage of Working Capital Financing with entity Return on Asset and hierarchical multiple regression determined the moderating influence of financial flexibility on linkage of Working Capital Financing with entity financial performance. Study established negative significant linkage of Working Capital Financing with Return on Asset. Study further established negative and significant moderating influence of the financial flexibility on linkage of Working Capital Financing with entity Return on Asset. Study concluded that smaller portion of short-term debt improve entity performance as greater levels of short-term debt reduces firm performance. Similarly, study concludes that firms should consider short-term external financial flexibility without affecting firm performance and consider internal financial flexibility that might present extra benefit to an entity to lessen adverse effect of hazardous WCF on firm financial performance by mitigating hitches of underinvestment plus diminishes cost of financial misery due to resource constraint.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Working capital management normally plays an integral role in various organizations due to its designed strategies that ensure companies operate efficiently by monitoring and using current assets and liabilities. Working Capital financing (WCF) portend substantial aspect in holding the firm's liquidity, existence, profitability plus affluence (Yahaya and Bala, 2015). Investing in working capital is essential in taking precise financing options, short or long term with benefits and shortcomings which considerably influence firm's financial flexibility and performance (Mahmood et al., 2019).

The study was underpinned by Risk Return Trade-off theory advanced by Hirigoyen (1985), Resource based Theory by Grant (2001), and Agency theory by Jensen & Meckling (1976). Risk return trade-off theory avers that firms administration do gauge risk return trade-off between expected profitability and risk, with every trade-off denoting opportunity cost of the other prior to forming the ideal WCF (Niresh, 2012). The Resource based theory by Grant (2001) which emphasizes effective management of current assets. Agency theory relates to delegation of authority by a firm owner to a financial manager. According to Aminu & Zainudin (2015), owners and managers take every key decisions concerning every short-range assets cum liabilities of a firm to maintain company's profitability and efficiency.

The non-financial organizations involve the companies that do not offer financial services such as banking. Mwangi et al, (2014) noted that 42 non-financial entities were quoted at NSE, Kenya. This has been enhancing their financial performances and efficiencies due to the application of conservative, aggressive, and matching financing policies, which have positive

effects on ROA and ROE. Although most NSE Non-financial firms have enriched their performance, several firms in the past decade have reduction in profitability, with some delisted. Substantial resolve to rejuvenate or liquidate such firms have engrossed on financial shakeup (Lalah, 2018). Therefore, non-financial organizations enhance financial performance because there are NSE benefits that include principal marketplace, prominence, leading exchange, exceptional touch, and operation speed.

### **1.1.1 Working Capital Financing**

Working capital is current assets less current liabilities. WCF involves fortitude of best funding approach of investments in short-term assets like cash, marketable securities, inventory, accounts receivable and current liabilities (Muhammad, Jan and Ullah, 2012). The WCF approaches entails aggressive, moderate and conservative working capital financing policies (Thakur and Muktadir, 2017).

Entities either embrace conservative working capital financing approach via devoting higher volumes of current assets (CA), financed by small quantity of short-term cradles of funds. This conservative working capital management strategy enable firms diminish together refinancing plus interest risk and may compel an entity endure high cost of liquidity. In the contrary, an entity might consider aggressive working capital financing approach through devoting small sums of CA, financed via using huge quantity of short-term cradles of funds. The aggressive WCM strategy enable entities lessen its financing costs, thus alleviate agency costs, but, may drive an entity endure punitive cost of illiquidity. Moderate working capital management strategy aim to poise equilibrium between aggressive with conservative approach (Banos-Caballero et al., 2016).

The study considered WCF computed via ratio of CL to TA, with ratio past 50 percent inferring Aggressive WCF, the inverse is Conservative WCF with less than 50 percent and exactly 50 percent as Moderate WCF (Bandara, 2015; Javid and Zita, 2014).

### **1.1.2 Financial Flexibility**

Financial flexibility denotes aptitude of an entity to retort to variations in work situations; alterations in environment, technology, markets plus structure (King`wara, 2015). Thus, financial flexibility enable an entity marshal its pecuniary properties to overcome imminent worries (Setiano and Kusumaputra, 2017). Financial flexibility emanate from both internal and external capital. The debt cum equity financing being capital from external sources. Financially flexible firms do hold huge cash inflow from operations, hefty lending aptitudes, or quickly realized assets in substantial volumes (FASB, 1980). Financially flexible entities can dodge financial distress amid crunch and easily fund investments once profitable prospects ascend. Entities enjoying financial flexibility easily appreciate exterior capital markets in attaining capital desires ascending from unanticipated incomes deficits and/or novel progress prospects, with less flexible being extra susceptible to abrupt cash flow reduction (Ayaydin, Florackis and Ozkan, 2014).

The study considered firm`s financial flexibility ascertained via cash holding, cash flows plus liquidity. Cash flows computed by beginning cash balance plus net cash flow from operation, ne financing actions, net investing events and difference in exchange. Cash holding computed as cash plus short-range investment all over TA. Liquidity denoted by quick ratio, calculated as CA less inventories all over CL (Setianto & Kusumpautra, 2017; Droj, 2018).

### **1.1.3 Financial Performance**

Financial performance denotes gauge in attaining financial objectives. It showcases ultimate entities financial health over review period or relate like firms within the industry or associate

industries in combination. McMahon (2011) states that for owners of a firm to maximize on their wealth they must look into profitability being weighty objective of financial management. There are several financial performance measures to evaluate both public and privately held firms such as profitability, return on sales and market share. Profitability denotes how a firm makes gains from factors of production like labor, administration plus capital. Profitability analysis relates revenues with expenses to ascertain cumulative profits comparative to firm's investment volume. Profitability metrics being ROA, ROE, operating profit margin, net income plus stock return. Return on sales shows what an entity makes in relative to its sales. (Hansen & Mowen, 2005). The elementary mandate of corporate finance revolves around optimizing the present worth of shareholder's venture (Brealey, Myers & Marcus, 2012).

Kamışlı (2019) explains that stock return is the stock investment profit in a certain time. It is also known as the calculation of the percentage of return over a measurement date. It requires many inputs and share price gain or losses such as spin-offs, and splits. Stock return is often important because it comprises capital gain or losses and divided that determine the entities' performances. Measurement of stock returns majorly includes ROA and ROE (Hatem, 2017). ROA assists financial users to know how efficiently a company generates profit growth from capital such as debt and equity. Besides, ROE is a gauge of the profitability and efficiency of corporations. This study considered financial performance proxied by ROA.

#### **1.1.4 Working Capital Financing, Financial Flexibility and Financial Performance**

The WCM pose vital impact on financial performance of organizations. Entities can either adopt aggressive or conservative WCF (Altaf & Shah, 2017; Temtime, 2016). The WCF policies

portend substantial effect on firms' performance. Aggressive working capital policy present inverse relationship to firm performance (Al-Shubiri, 2011). Firms must exercise financial flexibility by establishing equilibrium of liquidity cum profitability to expand financial performance. Proportion of WC financed via short-term credit do influence performance of an entity completely or undesirably (Banos-Caballero et al., 2016). Firms should pay increased devotion to the pointers of financial flexibility by relating to performance to attain competitive edge echoed on firm's presence, expansion and growth (Al-Slehat, 2019).

The Working capital financing had affirmative influence on profitability of entities to break-even point. Past break-even point, WCF jolts to undesirably influence firm profitability (Anton and Nucu, 2021). Observing risk-return band, resolutions that optimizes profitability do lessens possibility of suitable liquidity. Over aiming at liquidity lowered the possible profitability of the firm. Prompting option for diverse styles for WCF (Nyabuti & Alala, 2014). The WCF policies are aggressive and conservative WCF with varied influence on firms' financial performance worth exploring by the study.

### **1.1.5 Non-financial Entities Quoted at Nairobi Securities Exchange, Kenya**

The NSE, Kenya is licensed cum regulated by CMA, Kenya. It's mandated to offer trading podium for listed securities plus control member entities. The NSE enable listed firms trades numerous financial instruments like shares, bonds, derivatives, real estate instruments plus trusts.

Non-financial entities yield merchandises plus services to the market less financial assets and liabilities services. Two non-financial sectors include public and private. Its sector comprises manufacturers, utilities, business service provider airlines, haulage, and construction companies. However, the non-financial company should be among entities quoted at NSE to enhance their

WCF, financial flexibility on performance (Mwangi et al., 2014). Example of public non-financial firms includes KenGen, Kenya power & lightening (KPLC), Kenya airway, Kenya Orchard, and Bamburi cement while private non-financial include Safaricom that are listed at NSE.

The financial report of NSE indicates that these companies have been performing positively due to the adequate management that monitors their profitability and efficiencies. While Performance of non-financial organizations is determined based on their annual reports and financial statements published by NSE. Many financial users always use NSE information to make financial decisions such as investment, financing, and dividend. Thus, working capital financing, financial flexibility of non-financial firm's aid in determining profitability, efficiency, and liquidity. Non-financial firms do manufacture or offer services to create demand and supply for the business. It also creates a role in investment by facilitating capital access for timely production of goods and services. Therefore, the researchers should deeply study the non-financial firms to establish their primary contributions to the economy.

## **1.2 Research Problem**

Controlling Current assets plus Current liabilities of non-financial organizations has increased the importance of effective Working Capital Financing (WCF) and financial flexibility due to increased financial pressures on their profitability. Working capital financing present varied influence and levels of significance on financial performance in various sectors or industries (Kombo & Wekesa, 2017; Khalaf, & Al-Tarawneh, (2019), indicate that when a firm practice poor WCF, it may result in external sourcing of funds to run the business operation due to financial constraints. A firm has the option to adopt either conservative or aggressive WCF policy. The firm adopt a conservative WCF approach by opting for a small quantity of short-term



financing and aggressive WCF by opting for high level of short-term financing. A conservative WCF approach portend profit increase with huge liquidity risk. Conversely, an aggressive WCF approach potential lower profitability with low liquidity risk. These concepts presents conflicting debate, albeit, some studies in other countries showing conservative WCF increases profitability and some indicating negative influence on profitability (Adam et al., 2017; Nastiti, 2019). Indeed, the influence of WCF approaches and financial flexibility on financial performance having mixed results solicits for further empirical engagement.

Despite appropriate NSE regulation and world-class podium for equity securities plus bonds trading to Non-financial listed firms (Nyamweno and Olweny, 2014), some such as Bamburi Cement, Kenya Power, Express Kenya, Standard Group, Sanlam and Sameer Africa have failed to attain financial targets thus profit warning (NSE, 2021). Kenya Airways has been posting losses for over the last five years with Longhorn publishers and Express Kenya resorting to vending assets to improve their medium term performance (Orayo and Ombaba, 2017). Non-financial listed firms in Kenya that pursued aggressive WCF aim to optimize long-term yields, avail less liquidity to finance intermittent costs, exposing apparent flaws in their liquidity risk analysis plus management struggles resulted in decline in financial performance. Prompting consideration to adopt conservative WCF that visualized shorter operating plus cash conversion period (Mwangi, Makau and Kosimbei, 2014).

Various studies internationally explored linkage of WCF, financial flexibility on financial performance of entities. Altaf (2020) revealed inverse linkage of WCF on entity performance at ideal break-even point, past which short-range debt financing show undesirable influence on performance. The high financially flexible entities do finance a bigger part of WC via short-term

debt as break-even point becomes great for entities expected to be more financially flexible. Altaf and Ahmad (2019) confirmed the inverse linkage of WCF with firm performance. Panda and Nanda (2018) revealed that entities having greater financial flexibility plus great price-cost margin might upsurge profitability via financing grander slice of WC obligation via short-range debts plus persistence through risky WCF might upsurge profitability. Al-Slehat (2019) noted positive result on financial flexibility with performance of Jordanian services sector entities. Banos-Caballero et al, (2016) established WC requirement financing-performance link variations during financial crisis and contingent to entity's financial flexibility. In Kenya, Ooko, Githui and Omurwa (2018) concluded that firm size, profitability and CA pose substantial influence WCF requisite of non-financial entities quoted at NSE. Nyabuti and Alala (2014) noted a significant linkage between WCM policy and financial performance with no aspect of financial flexibility. There exists a research gap locally because no study has been undertaken that relates WCF with entity performance and determine the influence of financial flexibility on WCF and entity performance of non-financial organizations quoted at NSE. Thus, this study filled the knowledge gap by answering: What is the influence of Working Capital Financing and financial flexibility on financial performance of non-financial organizations cited at Nairobi Securities Exchange?

### **1.3 Research Objectives**

- i) To establish linkage of Working Capital Financing on financial performance of non-financial organizations cited at Nairobi Securities Exchange.
- ii) To determine moderating impact of financial flexibility on Working Capital Financing and financial performance of non-financial organizations cited at Nairobi Securities Exchange.

## **1.4 Value of the Study**

This study added value to existing theories plus filled the identified knowledge gap on linkage of WCF, financial flexibility on financial performance of non-financial entities quoted at NSE. Expanded theoretical and empirical development on literature on various studies using different variables were tested and adopted in Kenyan context.

The study enriched policies of non-financial organizations quoted at NSE, Kenya as policy makers would design data driven policy solutions. The study would always vouch for current non-financial organizations' policies and provides recommendation if there is a need for policymakers to revise strategy to improve WCF, financial flexibility and financial performance.

The study provided useful and practical insight in effective management of WC of non-financial entities quoted at NSE. Consultants would draw from this study to tailor the advice to clientele, based on instructions from huge profit recipients or an appreciation of peculiar WCF, financial flexibility and financial performance conditions of high profit earning firms. Shareholders plus prospective investors would apply the knowledge in appraising the different WCF styles, financial flexibility, and contribution to financial performance in their entities.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter outlines theoretical literature review, empirical literature review, summary of literature and knowledge gap cum study conceptual framework.

### **2.2 Theoretical Literature Review**

The study is anchored mainly on Risk Return Trade-off Theory; supported by Resource based Theory and Agency Theory. The three theories relates well to the linkage between working capital financing, financial flexibility with financial performance of firms. Risk Return Trade-off theory being the main anchor theory, avers that trade-off related to liquidity and profitability is vital as firms may fail or become insolvent if WCF is inaccurately inculcated (Raheman et al., 2010).

#### **2.2.1 Risk Return Trade-off Theory**

The Risk return Trade-off Theory of WC advanced by Hirigoyen (1985) and Eljelly (2004) avers that entities do uphold prime liquidity points for safeguarding balance linking cost with benefit of cash holdings. Trade-off theory is the main theory that anchor the study. Under ideal capital market assumption, the cash worth is neither ruined nor formed (Niresh, 2012). It advances that daily liquidity preservation is essential in handling WC, financial flexibility and promises sound outcome in firm's financial performance. Thus, checking firms' liquidity level is key for its survival (Panigrah, Namita and Chaitrali, 2018).

The theory similarly posit WC investment status plus funding at certain production scope supplemented by concession linking risk with returns. The bigger risk, anticipates bigger return required by stakeholders for WCF (Raheman et al 2010). The WCF has an impact on firms'

liquidity plus profit status, thus inducing capital budgeting choices. Lesser working capital translates into lesser funding requests with lesser cost, resulting in additional cash for shareholders (Nishanthini and Meerajancy, 2015).

This theory anchors this study as it is linked to working capital financing and financial flexibility measured by liquidity. Thus finance manager has to monitor CA and CL wisely taking cognizance of the extent of firm financial flexibility.

### **2.2.2 Resource Based Theory**

Firms' financial performance and continuity greatly depends on the resources invested in various forms. Thus, resource based theory by Grant (2001) require an entity manager to prioritize effective management of CA of the business (Alvarez and Busenitz, 2001). When working capital is financed well, positive outcome is guaranteed.

The Resource Based Theory implore upon business managers to specify resources, facilitate and recognize new opportunities and assemble adequate resources in an effective way, thus ensure prompt working capital financing geared towards increased financial performance. Working capital are resources key for the daily processing of goods and services sold by a firm. A firm's ability to produce better quality is dependent upon it resources and capabilities necessary in gaining competitive advantage in the industry (Akinsulire, 2008). Resource based theory consider both tangible and intangible such as knowledge regarding the firm and the human capital (Barney, 1991). The theory underpins the prudent use of working capital financing and financial flexibility to holistically attain increased financial performance.

### **2.2.3 Agency Theory**

The Agency Theory advanced by Jensen & Meckling (1976), presents linkage of business owner as the Principal and worker as an agent through delegated authority. The agency theory requires that agents exercise prudent expertise in performance of duties delegated to them, though conflict of interest may arise, thus, surrounded with controversy as the interest of the principal and agent differ.

The agency theory looks at how to ensure agents practice transparency in their relation with the principals of any business. Agents are entrusted with resources and are mandated to ensure firms resources are safeguarded devoid of conflicts of interests that may adversely affect the firm's financial performance. The agents are trusted by the principal to ensure efficient working capital financing, proper financial flexibility geared towards better financial performance.

### **2.3 Empirical Literature Review**

Various empirical studies done internationally plus locally have outlined the association of WCF, financial flexibility and financial performance with varied results. Internationally, Altaf (2020) employed two-step generalized method of moment technique (GMMT) to examine linkage of WCF, firm performance with financial flexibility in 185 Indian hospitality organizations for 10 years. The study revealed inverse linkage of WCF and entity performance at prime break-even point, past which short-range debt financing present undesirable outcome on performance. The study further noted that firms which are more financially flexible do finance grander part of WC via short-range debt as break-even point is great for entities probably be high financially flexible. Using other variables, Altaf and Ahmad (2019) scrutinized linkage of WCF, entity performance with financial constraints of 437 non-financial Indian entities from 2007 to 2016 using two-step GMMT. The study confirmed overturned U-shaped linkage of WCF with entity performance.

Panda and Nanda (2018) studied the linkage of WCF with entities profitability in 1211 manufacturing firms in Indian from 2000 to 2016 via two-step GMMT. The study further captured the variation in financing of WC requirement over diverse situations of price-cost margin plus financial flexibility. The study revealed that entities having great financial flexibility plus great price-cost margin may improve profitability through financing grander slice of WC requirement via short-range debts cum persistence with risky WCF might upsurge profitability.

Al-Slehat (2019) used multiple linear regression analysis and noted influence of financial flexibility on performance of Jordanian services segment entities from 2010 to 2017. Tangbani et al. (2018) observed effect of WCM on profitability of 802 entities listed at London Securities Market using dynamic panel data from 2004 to 2014. The study revealed that WCM significantly influence entity's profitability.

Further, Banos-Caballero et al., (2016) used two-step GMMT to investigate linkage of financing strategies of WC requirements, financial flexibility and SME performance between 1997 to 2012 in Indian firms. The study established that WC requirement financing-performance relation varies during financial crisis based on entity's financial flexibility.

In Kenyan context, Ooko, Githui and Omurwa (2018) examined the linkage of firm characteristics and financing of WC requirements via secondary data of 27 non-financial entities quoted at NSE between 2010 to 2016. The study concluded that firm size, profitability and CA pose substantial influence on WCF requisite of non-financial entities quoted at NSE. Mwangi, Makau and Kosimbei (2014) assessed influence of WCM on growth of non-financial entities quoted at NSE. Study shown aggressive WCF posed substantial affirmative influence on the ROA plus ROE while conservative WCF recorded positive influence on financial performance.

## **2.4 Summary of Literature Review and Knowledge Gap**

The studies reviewed presented wealth of knowledge on influence of WCF, financial flexibility and financial performance with different conceptual framework, methodology and mostly in developed countries context with different endowment giving varied results. Internationally (Altaf, 2020; Altaf & Ahmad , 2019; Al-Slehat, 2019; Panda & Nanda , 2018;Tangbani et al. , 2018; Banos-Caballero et al., 2016) examined WCF, entity performance and financial flexibility using different conceptual framework, context, methodology and obtained varying outcomes. Locally, (Ooko, Githui and Omurwa, 2018; Mwangi, Makau and Kosimbei, 2014) examined the entity features plus WCF requirements of non-financial entities quoted at NSE, exclusive of financial flexibility. The current study considered influence of all working capital financing approaches such as Aggressive, moderate and conservative plus all aspects of financial flexibility like cash flow, cash holding plus liquidity on financial performance proxied by ROA in Non-financial entities quoted at NSE.

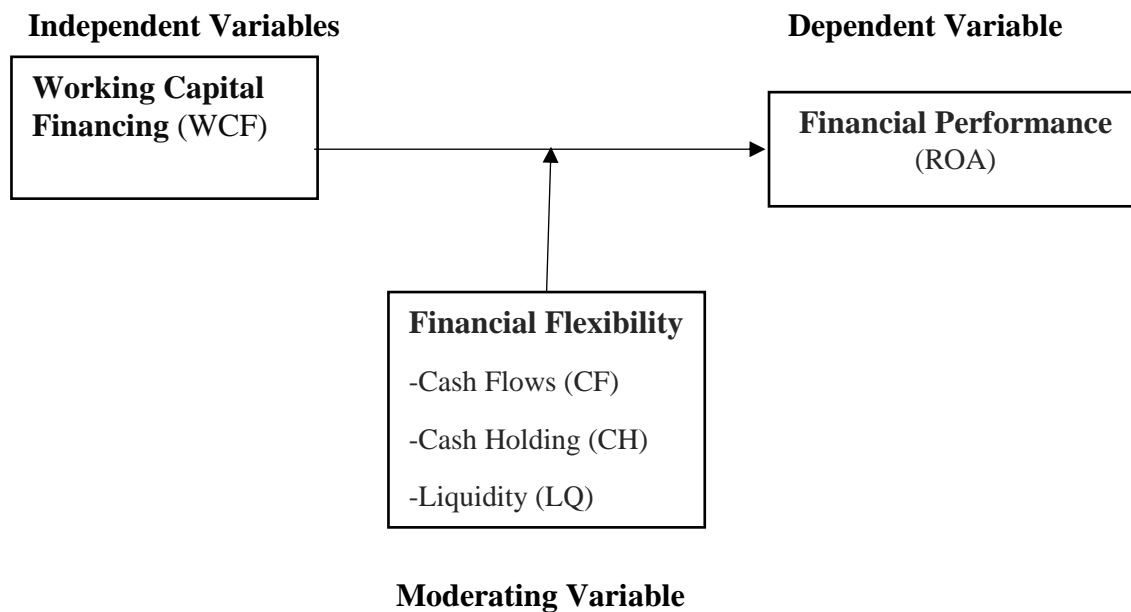
From the empirical analysis, no study has been conducted in Kenya on linkage of WCF, financial flexibility with financial performance of non-financial entities quoted at NSE. This study thus explored and filled the conceptual plus methodological knowledge gap in Kenyan context by examining the linkage of WCF, financial flexibility on financial performance of non-financial entities quoted at NSE.

## **2.5 Conceptual Framework**

Figure 2.1 elucidates conceptual model highlighting linkage of study predictor, moderating with dependent variables. Working Capital Financing is Independent Variables and Financial Flexibility being moderating while Financial Performance as study dependent variable. Working Capital Financing is expressed as aggressive, moderate as well as conservative based on the



strength of the ratio of current liabilities over current assets. Financial Flexibility as moderating variable is denoted by cash flows, cash holding and liquidity. Moderating variables are key in enabling the researcher assess whether two variables have the same relation a cross groups. Financial Performance is measured by ROA.



(Source: Researcher, 2022)

**Figure 2.1: Conceptual Model**

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents research design. It further highlights population, data collection process plus data analysis.

### **3.2 Research Design**

The study embraced correlation research design. Correlation research design is ideal for defining power cum trend of connotation amid variables (Cooper & Schindler, 2012). Correlation coefficient signifies alteration in a variable as a consequence of variation in other variables (Kothari and Garg, 2014). The correlation research design was similarly used successfully by Afza & Nazir (2009).

### **3.3 Target Population**

The study population encompassed 31 non-financial entities listed at NSE by 31<sup>st</sup> December 2021 that were in operation, and have published financial statements between 2017 to 2021 financial years. The study did not consider financial firms as their WCM differ with non-financial entities based on varied nature of business. The study considered census of the 31 non-financial listed firms (Appendix 1).

### **3.4 Data Collection**

Secondary quantitative data gathered through secondary data gather sheet from entity's yearly consolidated financial statements for financial years ending December 2017 to 2021, available in the individual firm's websites and filed with CMA, Kenya. The Secondary data usage guaranteed quick, dependable plus cost effective study (Cooper and Schindler, 2012). Secondary data gathering form was embraced to gather data for all study variables (Appendix II).

### 3.5 Data Analysis

The study panel data inputted/uploaded into SPSS software then analyzed via Descriptive statistics (mean, minimum, maximum plus standard deviation); Pearson correlation with panel data regression and hierarchical multiple regression analysis by Baron and Kenny (1986) shall showcase strength, association and relationships among independent and dependent variables and presented in tables.

#### 3.5.1 Analytical Model

The panel data regression plus hierarchical multiple regression analysis embraced for determining the moderating effect of financial flexibility (NCF, CH and LQ) on linkage between WCF and ROA of Non-financial entities quoted at NSE using Baron & Kenny (1986). Ensuing analytical model aligned to study objectives were used:

$$ROA_{it} = \alpha + b_1 WCF_{it} + e... (1)$$

$$ROA_{it} = \alpha + b_1 WCF_{it} + b_2 NCF_{it} + b_3 CH_{it} + b_4 LQ_{it} + e... (2)$$

The model for examining the moderating effect of financial flexibility:

$$ROA_{it} = \alpha + b_1 WCF_{it} + b_2 NCF_{it} + b_3 CH_{it} + b_4 LQ_{it} + b_5 WCF * NCF * CH * LQ + e.... (3)$$

Where:

ROA = Financial Performance computed by return on Asset of non-financial entities.

WCF = Working Capital Financing computed by CL over TA.

AWCF= Aggressive Working Capital Financing (Ratio of CL/TA above 0.5)

CWCF= Conservative Working Capital Financing (Ratio of CL/TA below 0.5)

NCF = Net Cash flows of non-financial entities quoted at NSE.

CH = Cash Holdings of non-financial entities quoted at NSE.

LQ = Liquidity of non-financial entities listed at NSE.

$i$  = Firm1 to Firm 31

$t$  = 2017, 2018, 2019, 2020, 2021.

$b_1, b_2, b_3, b_4$  = factor of predictor variables.  $\alpha$  = intercept.  $e$  = model error term.

Such model equally enabled Altaf & Ahmad (2019) and Banos-Caballero et al., (2016) to evaluate outcome of WCF, financial flexibility with firm financial performance.

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Introduction

The chapter presents data analysis, explicitly itemize discussion cum exhibition of results.

### 4.2 Descriptive Statistics

The descriptive statistics are conveyed as minimum, maximum, mean plus standard deviation.

Mean of both ROA and Independent variables have been presented in table as well as bar graphs.

**Table 4.1 Descriptive Statistics of Study Variables**

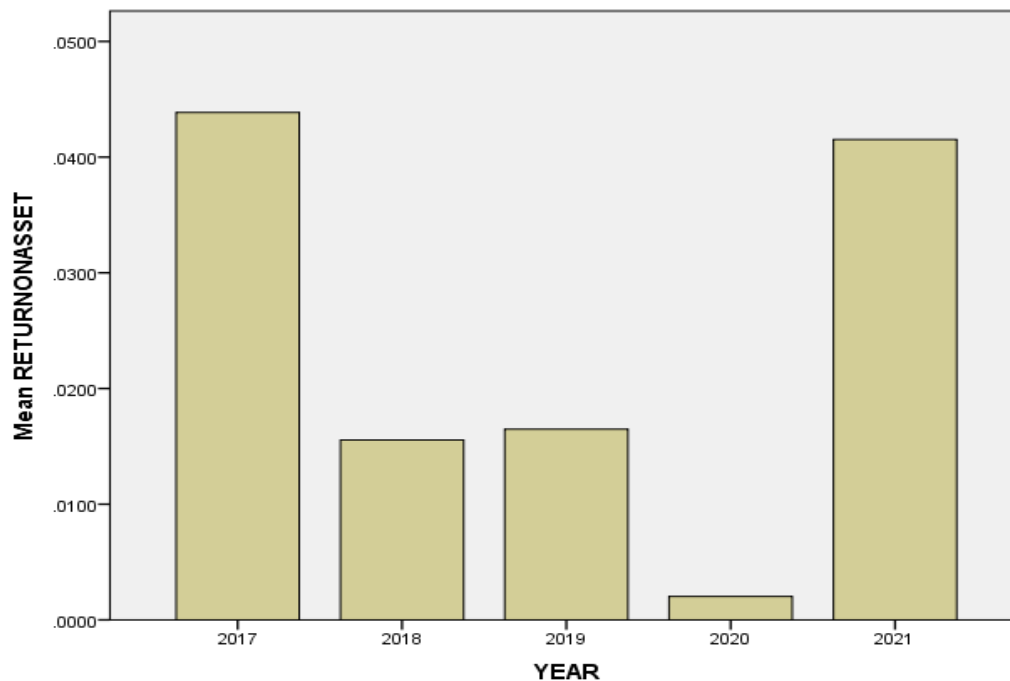
	N	Minimum	Maximum	Mean	Std. Deviation
WORKING CAPITAL FINANCING	155	.01	.95	.2977	.21253
RETURN ON ASSET (ROA)	155	-.8900	.4700	.023886	.1514390
NET CASH FLOWS (NCF)	155	-6.79	8.84	5.5688	1.58688
CASH HOLDING (CH)	155	.0002	.4400	.079437	.0932744
LIQUIDITY (LQ)	155	.02	13.59	2.2777	2.92345
Valid N (listwise)	155				

**Source: (Research Data, 2022)**

Table 4.1 shows minimum, maximum, mean plus standard deviations of 155 firm-years end observations for the study variables. The WCF had minimum of 0.01, maximum of 0.95 plus mean of 0.2977. This denoted non-financial entities quoted at NSE practiced either Aggressive WCF (where WCF ratio is above 0.5) or Conservative WCF (where WCF ratio is below 0.5). The ROA has minimum of -0.89, maximum of 0.47 plus mean of 0.023886. This depicted some non-financial entities quoted at NSE made losses, though majority registered profits as reflected by the mean.

The NCF had minimum of -6.79, maximum of 8.84 plus mean of 5.5688. This depicted few non-financial entities quoted at NSE had negative net cash flows with majority having positive net cash flows are shown by mean, thus practiced financial flexibility. The CH has minimum of 0.0002, maximum of 0.44 plus mean of 0.079437. This insinuated all non-financial firms listed at NSE had varied levels of Cash Holding as measure of financial flexibility. The LQ had minimum of 0.02, maximum 13.59 plus mean of 2.2777. This implied all the non-financial entities quoted at NSE hold liquidity at varied level to enhance financial flexibility.

**Figure 4.1 Mean Trend of Dependent Variable (ROA).**



**Source: (Research data, 2022)**

Figure 4.1 denotes mean trend of ROA from 2017 to 2021. The mean ROA of the non-financial entities quoted at NSE was highest in 2017 at 0.045, reduced in the year 2018 and 2019 with the lowest in 2020 at 0.0125. The drastic reduction in ROA in the year 2020 could be attributable to

reduced business due to devastating influence of COVID-19 pandemic on operation and profitability of businesses globally.

### 4.3 Correlational Analysis

The Pearson Correlation of the study variables: WCF, NCF, CH, LQ and ROA are illustrated.

**Table 4.2 Pearson Correlation of Variables**

		ROA	WCF	NCF	CH	LQ
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	155				
WCF	Pearson Correlation	-.216	1			
	Sig. (2-tailed)	.003				
	N	155	155			
NCF	Pearson Correlation	.275	-.057	1		
	Sig. (2-tailed)	.000	.242			
	N	155	155	155		
CH	Pearson Correlation	.157	.050	.223	1	
	Sig. (2-tailed)	.025	.267	.003		
	N	155	155	155	155	
LQ	Pearson Correlation	.133	-.613	-.017	.179	1
	Sig. (2-tailed)	.049	.000	.415	.013	
	N	155	155	155	155	155

Correlation is significant at 0.05 level (2-tailed).

**Source: (Research data, 2022)**

Table 4.2 illustrates Pearson Correlation between study Variables. Correlation factors ranges from -1.0 (perfect negative) to +1.0 (perfect positive) and assumed to be linear (Sekaran and Bougie, 2016; Kothari and Garg, 2014). The correlation showed strength of linkage between independent variable (WCF), moderating variables (NCF, CH and LQ) and dependent variable (ROA) of non-financial entities quoted at NSE, Kenya. WCF had correlation of -0.216 with ROA and significant at 0.003. This depicted negative significant association between WCF and ROA of non-financial entities quoted at NSE, Kenya. NCF had correlation of 0.275 with ROA and significant at 0.000. This denoted positive significant association between NCF and ROA of non-financial entities quoted at NSE, Kenya. CH had correlation of 0.157 with ROA and significant at 0.025. This insinuated positive significant association of CH and ROA of non-financial entities quoted at NSE, Kenya. LQ had correlation of 0.133 with ROA and significant at 0.049. This denoted positive significant association between LQ and ROA of non-financial entities quoted at NSE.

#### **4.4 Regression Analysis**

The panel data linear regression analysis on WCF with ROA and the hierarchical multiple regression used to ascertain moderating impact of financial flexibility on linkage between WCF and ROA run via SPSS aligned to the study objectives are illustrated.

##### **4.4.1 Relationship between Working Capital Financing and Return on Asset.**

The panel data linear regression analysis outlined linkage of WCF with ROA aligned to first study objective.



**Table 4.3: Model Summary of Relationship between WCF and ROA**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216 <sup>a</sup>	.047	.041	.1483386

a. Predictors: (Constant), WCF

**Source: (Research data, 2022)**

Table 4.3 shows model summary of linkage of WCF and ROA. R square of 0.047 signifying overall best fit. The R squared depicted 4.7% fitness in elucidating effect of WCF on ROA of non-financial entities quoted at NSE. Thus the model was ok and changes were justified and implied 4.7% changes in ROA are justified by variations in WCF while 95.3% of changes in ROA not admissible by WCF thus error term.

**Table 4.4: ANOVA of the linkage between WCF and ROA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.165	1	.165	7.505	.007 <sup>b</sup>
Residual	3.367	153	.022		
Total	3.532	154			

a. Dependent Variable: ROA

b. Predictors: (Constant), WCF

**Source: (Research data, 2022)**

Table 4.4 illustrates analysis of variance (ANOVA) that provides level of variability of the model and test of significance at 0.007. This depicts that the model fits to ascertain variability

with a level of significance at 0.007 ( $P < 0.05$ ). From the analysis, the model had  $F = 7.505$  and  $Sig. = 0.007$ .

**Table 4.5: Coefficient of linkage of WCF and ROA**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.070	.021		3.394	.001
WCF	-.154	.056	-.216	-2.739	.007

a. Dependent Variable: ROA

**Source: (Research data, 2022)**

Table 4.5 showed regression factor of WCF with ROA was -0.154 and significant at 0.001 ( $P < 0.05$ ). This depicted that WCF had negative significant impact on ROA of non-financial entities cited at NSE. Thus, model:  $ROA_{it} = \alpha + b_1 WCF_{it} + e$ , substituting the intercept, coefficients and error term, become:  $ROA_{it} = 0.07 - 0.154WCF_{it} + 0.148386$ .

#### **4.4.2 Moderating impact of Financial Flexibility on linkage of Working Capital Financing with Return on Asset.**

The hierarchical multiple regression model was used to ascertain moderating effect of financial flexibility (NCF, CH and LQ) on linkage between WCF and ROA using Baron and Kenny (1986) aligned to second study objective.

**Table 4.6: Model Summary of moderating impact of financial flexibility on WCF and ROA**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389 <sup>a</sup>	.151	.123	.1418296

a. Predictors: (Constant), WCF, CF, CH, LQ, WCF\*NCF\*CH\*LQ

**Source: (Research data, 2022)**

Table 4.6 illustrates model summary of linkage between WCF, CF, CH, LQ, WCF\*NCF\*CH\*LQ with ROA. The R square of 0.151 representing overall best fit and depicted 15.1% fitness in explaining influence of WCF, CF, CH, LQ, WCF\*NCF\*CH\*LQ on ROA of non-financial entities quoted at NSE. The model was ok and implied 15.1% of the variations in ROA are justified by changes in WCF, CF, CH, LQ, WCF\*NCF\*CH\*LQ while 84.9% of changes in ROA not justifiable by predictor variables thus error term.

**Table 4.7: ANOVA of moderating impact of financial flexibility on WCF and ROA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.535	5	.107	5.315	.000 <sup>b</sup>
Residual	2.997	149	.020		
Total	3.532	154			

a. Dependent Variable: ROA

b. Predictors: (Constant), WCF, CF, CH, LQ, WCF\*NCF\*CH\*LQ

**Source: (Research data, 2022)**

Table 4.7 shows analysis of variance (ANOVA) that provides level of variability of the model and test of significance at 0.000. This depicts that the model fits to ascertain variability with a level of significance at 0.000 ( $P < 0.05$ ). From the analysis, the model had  $F = 5.315$  and  $P = 0.000$ .

**Table 4.8: Coefficients of moderating impact of financial flexibility on WCF and ROA**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.087	.054		-1.606	.110
WCF	-.148	.070	-.207	-2.097	.038
NCF	.023	.007	.244	3.114	.002
CH	.716	.293	.441	2.445	.016
LQ	-.001	.005	-.021	-.208	.835
WCF*NCF*CH*LQ	-.133	.067	-.358	-1.998	.048

a. Dependent Variable: ROA

**Source: (Research data, 2022)**

Table 4.8 illustrates regression coefficients of WCF NCF, CH, LQ, WCF\*NCF\*CH\*LQ with ROA. The WCF had unstandardized coefficient of -0.148 and significant at 0.038 ( $P < 0.05$ ). This depicted that WCF had negative significant impact on ROA of non-financial entities quoted at NSE. NCF had unstandardized coefficients of 0.023 and significant at 0.002 ( $P < 0.05$ ). This denoted that NCF had positive significant impact on ROA of non-financial entities quoted at NSE. CH had unstandardized coefficient of 0.716 and significant at 0.016 ( $P < 0.05$ ). This insinuated that CH had positive significant effect on ROA. LQ had unstandardized coefficients of -0.001 and insignificant at 0.835 ( $P < 0.05$ ). This denoted that LQ had negative insignificant influence on ROA of non-financial entities quoted at NSE. Moderating influence of financial flexibility (WCF\*NCF\*CH\*LQ) had unstandardized coefficient of -0.133 and significant at

0.048. Thus, model:  $ROA_{it} = \alpha + b_1 WCF_{it} + b_2 NCF_{it} + b_3 CH_{it} + b_4 LQ_{it} + b_5 WCF_{it} * NCF_{it} * CH_{it} * LQ_{it} + e$ , substituting the intercept, coefficients and error term:  $ROA_{it} = -0.087 - 0.148 WCF_{it} + 0.023 NCF_{it} + 0.716 CH_{it} - 0.133 WCF_{it} * NCF_{it} * CH_{it} * LQ_{it} + 0.141896$ .

Liquidity (LQ) was excluded on the final model since it was insignificant.

#### **4.5 Discussion of Findings**

The study outcomes showed influence of WCF, financial flexibility on entity financial performance (ROA) of 155 firm-years end observations for the study variables as analyzed via descriptive, correlation, panel data and hierarchical multiple regression analysis.

The descriptive statistics outcomes were: The WCF had minimum of 0.01, maximum of 0.95 plus mean of 0.298. This denoted that non-financial entities quoted at NSE practiced either Aggressive WCF (where WCF ratio is above 0.5) or Conservative WCF (where WCF ratio is below 0.5), indicating heterogeneity of WCF policy across entities. The findings were consistent with results of (Altaf, 2020; Altaf and Ahmad, 2019) done in Indian context. The NCF had minimum of -6.79, maximum of 8.84 plus mean of 5.569. This depicts that few non-financial firms listed at NSE had negative net cash flows with majority having positive net cash flows are shown by mean, thus practiced financial flexibility. The CH has minimum of 0.0002, maximum of 0.44 and Mean of 0.079. This insinuates that all non-financial firms listed at NSE had varied levels of Cash Holding as measure of financial flexibility. The LQ had minimum of 0.02, maximum 13.59 and Mean of 2.278. This implies that all non-financial entities quoted at NSE hold liquidity at varied level to enhance financial flexibility. The ROA had minimum of -0.89, maximum of 0.47 plus mean of 0.024. This depicted some non-financial entities quoted at NSE made losses, though majority registered profits as reflected by the mean. These descriptive statistics findings are in tandem with the results of (Altaf, 2020; Altaf and Ahmad, 2019; Panda

and Nanda, 2018 Ooko, Githui and Omurwa, 2018) that noted firms adopted either Aggressive WCF or Conservative WCF with varied levels of financial flexibility which positively enhanced firm performance (ROA).

The correlation analysis results were: The WCF had correlation of -0.216 with ROA and significant at 0.003. This depicted negative significant association between WCF and ROA of non-financial entities quoted at NSE. The findings conform to (Altaf and Ahmad, 2019; Panda and Nanda, 2018; Ooko, Githui and Omurwa, 2018) that similarly revealed a negative correlation between WCF with ROA. The NCF had correlation of 0.275 with ROA and significant at 0.000. This denoted positive significant association between NCF and ROA of non-financial entities quoted at NSE. CH had correlation of 0.157 with ROA and significant at 0.025. This insinuated positive significant association of CH and ROA of non-financial entities quoted at NSE. LQ had correlation of 0.133 with ROA and significant at 0.049. This denoted positive significant association between LQ and ROA of non-financial entities cited at NSE. Study outcome conformed to findings of Altaf (2020) that showed financial flexibility (NCF, CH and LQ) had positive correlation with firm performance (ROA).

The regression analysis results were: The regression coefficients of WCF with ROA was -0.154 and significant at 0.001( $P < 0.05$ ). This depicted that WCF had negative significant impact on ROA of non-financial entities cited at NSE. Results conform to (Altaf, 2020; Altaf and Ahmad, 2019; Panda and Nanda, 2018; Ooko, Githui and Omurwa, 2018) that similarly revealed a negative relationship between WCF with ROA.

The hierarchical multiple regression coefficients of moderating effect of financial flexibility on the link between WCF with ROA result were: The WCF had unstandardized coefficient of -0.148 and significant at 0.038 ( $P < 0.05$ ). This depicted that WCF had negative significant

impact on ROA of non-financial entities cited at NSE. Outcomes were in consonance to results of (Altaf, 2020; Altaf and Ahmad, 2019; Panda and Nanda, 2018) done in Indian context. The NCF had unstandardized coefficients of 0.023 and significant at 0.002. This denoted that NCF had positive significant impact on ROA of non-financial entities cited at NSE. CH had unstandardized coefficient of 0.716 and significant at 0.016. This insinuated Cash Holding had positive significant effect on firm performance (ROA). The LQ had unstandardized coefficients of -0.001 and insignificant at 0.835 ( $P < 0.05$ ). This denoted that LQ had negative insignificant influence on ROA of non-financial entities quoted at NSE. Moderating influence of financial flexibility on linkage between WCF and ROA had unstandardized coefficient of -0.133 and significant at 0.048. The these results were in conformance to the findings of Altaf, 2020; Altaf and Ahmad, 2019; Panda and Nanda, 2018; Al-Slehat, 2019) despite the difference in regression method, where hierarchical multiple regression adopted in this study to ascertain moderating influence of financial flexibility (NCF, CH and LQ) on the linkage between WCF and ROA as was advanced by Baron and Kenny (1986) while the other comparative studies used two- step GMMT by Arellano and Bond (1991).



## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

The chapter outlines summary, conclusion, recommendations and limitation of the study alongside propositions for additional research.

### **5.2 Summary of Findings**

The study examined influence of WCF as independent variable and moderating effect of financial flexibility (NCF, CH and LQ) on ROA of non-financial entities quoted at NSE. Risk Return Trade-Off theory as the main anchor theory, supported by Resource based theory plus Agency Theory. The study adopted correlation research design. The secondary data for 2017 to 2021 obtained from audited financial statements of 31 non-financial entities quoted at NSE, Kenya where panel data of 155 firm-year end observations were analyzed.

The descriptive statistics outcomes show: Non-financial entities quoted at NSE practiced either Aggressive WCF (where  $WCF > 0.5$ ) or Conservative WCF (where  $WCF < 0.5$ ) as WCF recorded minimum of 0.01, maximum of 0.95 plus mean of 0.298. The NCF had minimum of -6.79, maximum of 8.84 plus mean of 5.569. The majority of non-financial entities quoted at NSE had positive cash flows with few recording negative net cash flows as shown by mean, thus practiced financial flexibility. All non-financial entities quoted at NSE had varied levels of Cash Holding as measure of financial flexibility as shown by CH having minimum of 0.0002, maximum of 0.44 plus Mean of 0.079. All non-financial entities quoted at NSE hold liquidity at varied level to enhance financial flexibility as LQ had minimum of 0.02, maximum 13.59 plus mean of 2.278. The Some non-financial entities quoted at NSE made losses, though majority

registered profits as reflected by the ROA with minimum of -0.89, maximum of 0.47 plus mean of 0.024.

The correlation analysis results: The WCF had negative significant association of -0.216 between WCF and ROA of non-financial entities quoted at NSE, Kenya. NCF had positive significant and association of 0.275 between NCF and ROA of non-financial entities quoted at NSE, Kenya. CH had positive and significant association of 0.157 between CH and ROA of non-financial entities quoted at NSE, Kenya. LQ had positive and significant association of 0.133 between LQ and ROA of non-financial entities quoted at NSE, Kenya.

From panel data regression analysis: The WCF had negative and significant influence of -0.154 on ROA of non-financial entities quoted at NSE, Kenya. Hierarchical multiple regression findings on moderating influence of financial flexibility on the link between WCF with ROA were: The WCF had negative and significant influence of -0.148 on ROA of non-financial entities quoted at NSE, Kenya. NCF had positive significant influence of 0.023 on ROA of non-financial entities quoted at NSE, Kenya. CH had positive significant effect of 0.716 on ROA. LQ had negative insignificant influence of -0.001 on ROA of non-financial entities quoted at NSE. The moderating influence of financial flexibility had negative and significant influence of -0.133 on the relationship between WCF and ROA. Liquidity (LQ) was excluded on the final model since it was insignificant. Thus, the revised model:

$$ROA_{it} = -0.087 - 0.148WCF_{it} + 0.023NCF_{it} + 0.716CH_{it} - 0.133WCF_{it} * NCF_{it} * CH_{it} * LQ_{it} + 0.141896.$$

### **5.3 Conclusion of the Study**

The study finding aligned to first objective showed that the Working Capital Financing had negative significant impact on ROA of non-financial entities quoted at NSE. Therefore, study

concludes that smaller portions of short-term debt improve entity performance as greater levels of short-term debt reduces entity performance. Non-financial entities cited at NSE, has to strike optimal level of Working Capital Financing conducive to prevailing business environment to maintain steady firm performance aligned to stakeholders' interest.

The study finding aligned to second objective showed that the moderating effect of financial flexibility had negative and significant effect on linkage between Working Capital Financing and Return on Asset. The study concludes, firms should consider short-term external financial flexibility without affecting firm performance. Firms to consider internal financial flexibility that might present extra benefit to entities to alleviate negative impact of hazardous WCF on firm financial performance by mitigating hitches of underinvestment plus diminishes cost of financial distress due to resource constraint.

#### **5.4 Recommendations of the Study**

The non-financial entities quoted at NSE should monitor, review and adopt proficient WCF and conducive financial flexibility to maximize their profitability. Since firms financial performance hang on suitable WCF with steadiness, entities with greater financial flexibility might embrace numerous financial strategies or chart favourable financial practices that contributes to firm performance. Prudent management of working capital lowers operating costs which is critical to every non-financial entity.

This study offers guidelines to other scholars plus researchers in future researches when used as reference material. The outcome shall enable scholars and researchers advance theories on linkage of Working Capital financing, financial flexibility with firms' financial performance (return on asset).

The government through Capital Markets Authority (CMA) and NSE should come up with regulatory measures geared towards improving WCF, financial flexibility of the non-financial firms to enhance their financial performance strength. Consider review of regulations affective working capital financing policies to improve performance not only for the non-financial entities quoted at NSE but also for entities in other sectors be developed based on the study outcome.

### **5.5 Limitations of the Study**

The study only used secondary panel data gathered from audited financial statements of non-financial entities quoted at NSE, views of key informants at non-financial firms via questionnaire were not considered in the study. The study did not consider primary data obtainable from key informants in the firms such as Chief Executive officers plus Finance Officers.

This study was limited to non-financial entities quoted at NSE Kenya, therefore outcomes might not relate to other entities in Kenya. Financial entities such as Banking and Insurance Institutions due to their major concentration mostly on large Working Capital Financing and financial flexibility may present varied results, which the study did not explore.

The study was restricted to WCF, financial flexibility influence on financial performance deduced by ROA, other aspects of WC such as WCM practices were not studied. Similarly, additional metrics of firm financial performance like ROE plus market value (Tobin`s Q) not examined. The effect on WCF and financial flexibility on these other measures of firm financial performance in non-financial entities quoted in NSE was not explored.

## **5.6 Propositions for further Research**

Subsequent studies to consider effect of WCF categorized as Aggressive and Conservative, financial flexibility on financial performance of non-financial entities quoted at NSE plus other sector entities before, at and after break even using two step GMMT by Arellano and bond (1991) in Kenya.

Another study should focus on WCM practices adopted by non-financial entities quoted at NSE. This shall enable enriching more current knowledge on these other facets of WCM impact on financial performance of the non-financial entities quoted at NSE.

Another study should consider influence of WCF, Financial flexibility on firm financial performance measured by ROE plus market value (Tobin's Q) of non-financial entities quoted at NSE. Such studies shall be handy to enable further knowledge on impact of WCF, financial flexibility on financial performance of the non-financial entities quoted at NSE.

## REFERENCES

- Adam, A. M., Quansah, E., and Kawor, S. (2017). Working Capital Management Policies and Returns of Listed Manufacturing Firms in Ghana. *Scientific Annals of Economics and Business*, 64 (2), 255-269.
- Altaf, N. (2020). Working Capital Financing, Firm performance and financial flexibility: Evidence from Indian Hospitality Firms. *Global Business Review*.
- Al-Slehat, Z. F. (2017). The Impact of the Financial Flexibility on the performance: An empirical study on a sample of Jordanian Services Sector Firms in period (2010-2017). *International Journal of Business and Management*, 14 (6), 1-10.
- Altaf, N. and Ahmad, F. (2019). Working Capital Financing, Firm performance and financial constraints in Indian Companies. *International Journal of Managerial Finance*, 15 (4), 464-477.
- Aminu, Y., & Zainudin, N. (2015). A review of anatomy of working capital management theories and the relevant linkages to working capital components: A theoretical building approach. *European Journal of Business and Management*, 7(2), 10-18.
- Arellano, M. and Bond, S. (1991). Some tests of specification for panel data: Monte Carlo Evidence and an application to Employment equations. *Review of Economic studies*, 58 (2), 277-297.
- Arslan-Ayaydin, o., Florackis, C. and Ozkan, A. (2014). Financial Flexibility, Corporate Investment and performance: Evidence from Financial crises. *Review of Quantitative Finance and Accounting*, 42, 211-250.

- Bandara, R. M. S. (2015). Impact of Working Capital Management Policy on Market Value Addition. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2).
- Banos-Caballero, S., Garcia-Teruel, P. J., and Martinez-Solano, P. (2016). Financing of working capital requirements, financial flexibility and SME performance. *Journal of Business Economics and Management*, 17 (6), 1189-1204.
- Brealey, R. A., C, M. S., & Marcus, A. J. (2012). *Fundamentals of Corporate Finance (7th ed.)*. McGraw-Hill Irwin.
- Brealey, R. A., Myers, S. C., & Allen, F. (2011). *Principles of Corporate Finance (10th ed.)*. McGraw-Hill Irwin.
- Cooper, R. & Schindler, P. (2012). *Business research methods*. Tata McGraw Hill.
- Dalci and Ozyapici (2018) investigated working capital management policy in health care: the effect of leverage. *Journal of health policy, Elsevier*, 122 (11), 1266-1272
- Deloof, M. (2003). Does Working Capital Management affect Profitability of Belgian Firms? *Journal of Business Finance & Accounting*, 30 (3), 573-587.
- Droj, L. (2018). Considerations regarding the evolution of the liquidity and solvency indicators of the most important Romanian production companies in the period 2014- 2017. The Annals of the University of Oradea. *Economic Sciences*, 26 (2), 94- 101.
- Eljelly, A. (2004). Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market. *International Journal of Commerce & Management*, 14(2), 48-61.
- Hatem, B. S. (2017). How Can We Measure Stock Market Returns? *An International Comparison. International Business Research*, 10 (5), 121-126.

- Javid, S. & Zita, V. P. M. (2014). Impact of Working Capital Policy on Firm's Profitability: A case of Pakistan Cement Industry. *Research Journal of Finance and Accounting*, 5 (5).
- Kamışlı, M. (2019). Effect of Migration Fear on Sectors: Case of Developed European Markets. *In Analytics, Operations, and Strategic Decision Making in the Public Sector*. IGI Global, 324-356.
- King`wara, R. (2015). The relationship between Financial Flexibility and Dividend Payouts: A case of listed Firms in Kenya. *European Journal of Business and Management*, 7 (3), 51-58.
- Khalaf, B. K. A., & Al-Tarawneh, A. (2019). Impact of Corporate Governance on the Efficiency of Managing Working Capital in the Manufacturing Sector in Jordan. *Jordan Journal of Business Administration*, 15 (2), 201-208.
- Kombo, J. A. and Wekesa, M. (2017). Effect of working capital management on financial performance of private medical facilities in Mombasa County. *The Strategic Journal of Business and Change management*, 4 (10), 169-188.
- Kothari, C.R. and Garg, C. (2014). *Research Methodology; Methods and Techniques*. Second Revised Edition New Age International publishers' ltd. New Delhi
- Lalah, A. A. (2018). Effects of Working Capital Management on financial performance of manufacturing companies listed at the Nairobi Securities Exchange, Kenya. *Unpublished MBA Project, Moi University*.



- Luchinga, L. M. (2014). The effect of working capital management on the profitability of agricultural firms listed at the Nairobi Securities Exchange. *Unpublished MBA Research Project*. Nairobi, Kenya: University of Nairobi.
- Mathuva, D. (2009). The Influence of Working Capital Management Components on Corporate Profitability: A survey on Kenyan listed firms. *Research Journal of Business Management, 4 (1), 1-11*.
- McMahon, M. (2011). The systems theory framework of career development. *Journal of Employment Counseling, 48 (4)*.
- Mwangi, L. W., Makau, M. S., & Kosimbei, G. (2014). Effects of working capital management on performance of non-financial companies listed in NSE, Kenya. *European journal of business and management, 6 (11), 195-205*.
- Nastiti, P. K. Y., Atahau, A. D. R., and Supramono, S. (2019). Working Capital Management and its influence on Profitability and Sustainable Growth. *Business: Theory and Practice, 20, 61-68.43*
- Niresh, J. A. (2012). Trade-off between liquidity and profitability: A study of selected manufacturing firms in Sri Lanka. *Researchers World, 3 (4), 34-41*.
- Nyabuti, W. M., & Alala, O. B. (2014). The Relationship Between Working Capital Management Policy and Financial Performance of Companies Quoted at the Nairobi Securities Exchange, Kenya. *International Journal of Economics, Finance and Management Sciences, 2 (3), 212-219*.

- Ooko, A., Githui, T., and Omurwa, J. (2018). Firm Characteristics and Financing of Working Capital Requirement in Organizations: A case of Non- Financial Firms listed at Nairobi Securities Exchange. *Stratford Peer Reviewed Journals and books*, 2 (1).
- Panda, A. K. and Nanda, S. (2018). Working Capital Financing and Corporate Profitability of Indian Manufacturing firms. *Management Decision*, 56 (2), 441-457.
- Samiloglu, F., & Demiraunes, K. (2008). The Effect of Working Capital Management on the Firm Profitability: Evidence from Turkey. *International Journal of Applied Economics and Finance*, 2 (1), 44-50.
- Setianto, R. and Kusumpautra, A. (2017). Corporate finance flexibility, investment activities and cash holding: Evidence from Indonesia. *Indonesian Capital market Review*, 9, 75-85.
- Temtime, Z. T. (2016). Working Capital Management policies and profitability of small manufacturing firms. *Unpublished Doctoral Thesis, Walden University*.
- Tingbani, I., Tauringama, V., Damoah, I. S., and Shaven, W. B. (2018). Working Capital Management and Financial Performance of UK listed firms: A contingency Approach. *International Journal of Banking, Accounting and Finance*, 7 (4), 1-39.
- Uyar, A. (2009). The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey. *International Research Journal of Finance and Economics*, 24, 186-193
- Yahaya, A., and Bala, H. (2015). Working Capital Management and financial performance of deposit money banks in Nigeria. *Research Journal of Finance and Accounting*, 6 (16), 57-72.

## APPENDICES

### Appendix I: Non-Financial Firms Listed at NSE, Kenya

SECTOR/SEGMENT/CATEGORY	FIRMS
Agricultural	1. Eaagads Limited 2. Kakuzi Limited. 3. Kapchorua Tea Company Limited. 4. Limuru Tea Company Limited. 5. Sasini Tea and Coffee Company.
Automobile and Accessories	6. Car and General
Commercial and Services	7. Express Kenya Limited. 8. Kenya Airways. 9. Longhorn Kenya Limited. 10. Nation Media Group. 11. Scan Group. 12. Standard Group Limited. 13. TPS Serena. 14. Nairobi Business Ventures PLC
Construction and Allied	15. Bamburi Cement Company Limited. 16. Crown Berger Kenya. 17. East African Cables Limited. 18. East African Portland Cement Company.
Energy and Petroleum	19. Kengen. 20. Kenya Power and Lightening Company. 21. Total Kenya Limited.
Investment Services	22. Nairobi Securities Exchange
Manufacturing and Allied	23. BOC Kenya Limited. 24. British American Tobacco Limited. 25. Carbacid Investments Limited. 26. East African Breweries. 27. Eveready East Africa. 28. Unga Group. 29. Flame Tree Group Holdings.
Telecommunication	30. Safaricom.
Real Estate Investment Trust	31. Stanlib Fahari I-REIT

## Appendix II: Secondary Data Gather Form

Non-Financial entity Name:

<b>Independent Variable</b>			
<b>Symbol</b>	<b>Measures and Component</b>	<b>Formulae</b>	<b>Output</b>
<b>WCF</b>	<b>Working Capital Financing</b>	Current Liabilities/Total Asset	
	Current Liabilities (CL)		
	Total Assets (TA)		
<b>AWCF</b>	Aggressive WCF	CL/TA Ratio above 50%	
<b>CWCF</b>	Conservative WCF	CL/TA Ratio below 50%	
<b>Moderating Variable</b>			
<b>FF</b>	<b>Financial Flexibility</b>		
<b>CF</b>	<b>Net Cash Flow</b>	Opening Cash balance plus Net operating cash flow plus Net investing cash flow plus Net financing cash flow	
	Opening Cash balance		
	Net operating cash flow		
	Net investing cash flow		
	Net financing cash flow		
<b>CH</b>	<b>Cash Holdings</b>	(Cash + Cash equivalents) / Total Assets	
	Cash		
	Cash Equivalents		
	Total Assets		
<b>LQ</b>	<b>Liquidity</b>	(Current Asset less closing Inventory)/ Current Liabilities	
	Current Asset		
	Closing Inventory		
	Current liabilities		
<b>Dependent Variable</b>			
<b>ROA</b>	<b>Return on Asset</b>	Net Income/Total Assets	
	Net Income		
	Total Assets		