



Electronic Theses and Dissertations

2025

Effects of board and firm characteristics on cash conversion cycle in Kenyan non-financial listed firms: moderated by inflation rate.

Getuma, Clinton
Strathmore Business School
Strathmore University

Recommended Citation

Getuma, C. (2025). *Effects of board and firm characteristics on cash conversion cycle in Kenyan non-financial listed firms: Moderated by inflation rate* [Strathmore University]. <http://hdl.handle.net/11071/15833>

Follow this and additional works at: <http://hdl.handle.net/11071/15833>

**EFFECTS OF BOARD AND FIRM CHARACTERISTICS ON CASH CONVERSION
CYCLE IN KENYAN NON-FINANCIAL LISTED FIRMS: MODERATED BY
INFLATION RATE**



**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTER OF COMMERCE,
STRATHMORE UNIVERSITY BUSINESS SCHOOL, STRATHMORE
UNIVERSITY**

May, 2025

DECLARATION

It is my affirmation that this particular piece of work has not been offered and authorized for the purpose of conferring a degree by any other institution of higher education, including this one. It is my understanding and conviction that the thesis does not contain any content that has been previously published or created by another individual, unless the appropriate acknowledgment is supplied within the thesis itself. This is the case to the greatest extent possible.

Otwori Clinton Getuma

Reg no. 89223

Signature:



Date: 4/04/2024

Approval

This research thesis has been submitted for presentation with my approval as the Strathmore University Supervisor.

Dr. James Ndegwa

Strathmore University Business School

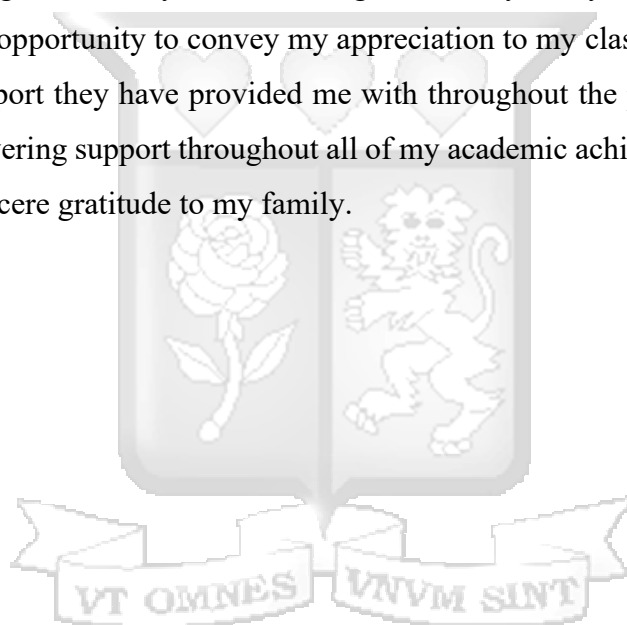
Signature:



Date: 4/4/23

ACKNOWLEDGEMENT

I would like to express my gratitude to God for bestowing upon me the strength to overcome any and all challenges that I have encountered on this momentous trip and for enabling me to accomplish my academic goals. Second, I would like to express my gratitude to the Strathmore Business School for providing me with the chance to participate in the course. This thesis would not have been possible without the assistance of Dr. James Ndegwa, a lecturer at Strathmore Business School, who has been an excellent resource throughout the entire process. In addition, I would like to express my gratitude to my instructors for the time they took to work with me and the guidance they offered during the entirety of my education. In addition, I would like to use this opportunity to convey my appreciation to my classmates and coworkers for the emotional support they have provided me with throughout the process of writing this essay. For their unwavering support throughout all of my academic achievements, I would like to extend my most sincere gratitude to my family.



ABSTRACT

In 2022, the liquidity ratio of eight (8) business stocks was below 10 percent, which is an increase compared to six (6) stocks in 2021. This indicates a further decline in liquidity. This study sought to assess the effect of board, firm characteristics and cash conversion cycle in Kenyan Listed Firms, moderated by inflation. Specifically, the study sought to examine the effect of firm characteristics on the cash conversion cycle of Listed Firms in Kenya. Also, the study assessed the effect of board characteristics on the cash conversion cycle of Listed Firms in Kenya. Additionally, it investigated the moderating role of inflation rate on the relationship between board characteristics and firm characteristics on the cash conversion cycle of Listed Firms in Kenya. The study was based on two theories: the Liquidity Preference Theory and Resource Dependency Theory. The current study used a correlational research design and the positivism philosophy. The 63 companies listed on the NSE were the study's target population. The study focused on 45 non-financial listed firms. Panel data was gathered from publicly available financial statements on the websites of 45 publicly traded companies for the years 2019 to 2023, as well as published audited financial statements. The data abstraction tool was used to acquire the panel data. Descriptive statistics, panel regression analysis, and spearman's simple correlation analysis were used to analyze the data. The study included ethical considerations. The results showed that independent directors had a positive and significant effect on the cash conversion cycle. Further results showed that board diversity in terms of proportion of male directors in the board had a negative and significant effect on the cash conversion cycle. In addition, results showed that board size had a positive and significant effect on the cash conversion cycle. Regression results showed that firm age had a negative and significant effect on the cash conversion cycle amongst the firms listed in the NSE. Furthermore, the data indicated that the cash conversion cycle was positively and marginally impacted by business size. In addition inflation moderated the relationship between board characteristics and cash conversion cycle of companies listed on the NSE. However, inflation did not moderate the relationship between firm age, firm size and cash conversion cycle of firms listed in NSE. Therefore, our study suggests that companies listed on the NSE keep their board member count at an ideal number. The management of the listed company should make sure that board members have a great deal of autonomy so they can participate freely in the appropriate decision-making process. Legislators ought to enact measures that promote diversity on the board among board members. This would guarantee the fusion of concepts that would maximize the performance of the SACCOS by integrating ideas from both genders. Businesses can add value by building up their inventory, but only to the point where doing so will optimize returns and reduce maintenance costs while accounting for the effects of inflation and the cash conversion cycle. By doing this, finance managers may monitor their different industries and maintain a short cash conversion cycle. The study also relied on secondary data from the financial statements of the NSE firms in Kenya. While these are a reliable source of data, it is quantitative in nature and therefore it was not possible to fully interrogate issues of the NSE firms as may have been the case if interviews were conducted.

TABLE OF CONTENTS

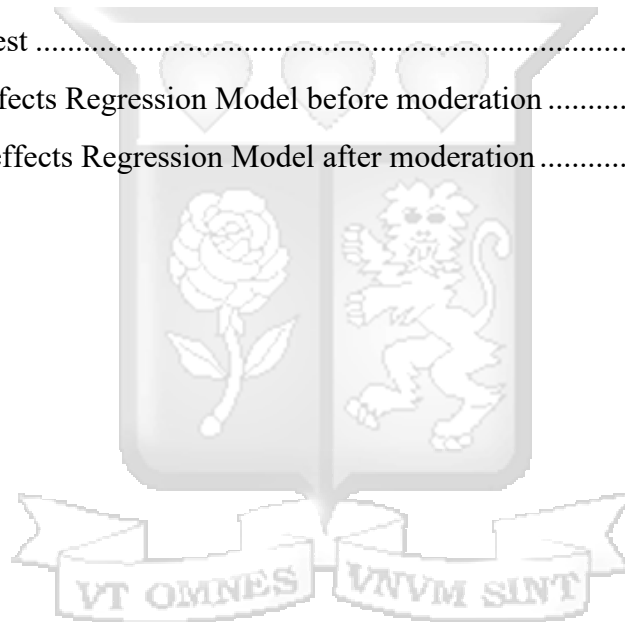
DECLARATION.....	ii
ACKNOWLEDGEMENT.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
DEFINITION OF TERMS.....	xi
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Cash Conversion Cycle	3
1.1.2 Board Characteristics.....	6
1.1.3 Firm Characteristics.....	9
1.1.4 Moderating Role of Inflation Rate	12
1.1.5 Nairobi Securities Exchange	13
1.2 Statement of Problem	14
1.3 General Objective.....	16
1.3.1 Specific Objectives	16
1.4 Research Questions	16
1.5 Scope of the Study.....	16
1.6 Significance of the Study	17
1.6.1 Managers of NSE	17
1.6.2 Investors	17
1.6.3 Researchers.....	17
1.6.4 Policy Makers.....	17
1.7 Chapter Summary.....	17
CHAPTER TWO	18
LITERATURE REVIEW	18
2.1 Introduction	18
2.2 Theoretical Reviews	18
2.2.1 Liquidity Preference Theory.....	18
2.2.2 Resource Dependency Theory.....	20
2.3 Empirical Literature Review	22

2.3.1 Board Characteristics and Cash Conversion Cycle	22
2.3.2 Firm Characteristics and Cash Conversion Cycle	30
2.3.3 Moderating Effect of Inflation Rate	39
2.4 Summary of Literature Review and Research Gaps	40
2.5 Conceptual Framework	45
2.6 Chapter Summary	45
CHAPTER THREE	47
RESEARCH METHODOLOGY	47
3.1 Introduction	47
3.2 Research Philosophy	47
3.3 Research Design	48
3.4 Target Population	48
3.5 Sampling and Sampling Procedure	49
3.6 Data Collection.....	49
3.7 Data Collection Instrument	49
3.8 Data Collection Procedure	50
3.9 Data Analysis and Presentation.....	50
3.9.1 Statistical Model.....	51
3.10 Test of Significance.....	52
3.11 Diagnostic Test.....	52
3.11.1 Normality Test.....	53
3.11.2 Multicollinearity Test.....	53
3.11.3 Heteroscedasticity Test.....	53
3.11.4 Autocorrelation Test.....	54
3.11.5 Stationarity Test.....	54
3.12 Ethical Consideration	55
CHAPTER FOUR.....	56
THE PRESENTATION OF RESEARCH RESULTS	56
4.1 Introduction	56
4.2 Sample Representation.....	56
4.3 Descriptive Analysis	56
4.4 Diagnostic Tests	57
4.4.1 Test for Normality	57
4.4.2 Test for Multicollinearity	58
4.4.3 Heteroskedasticity Test	58
4.4.4 Tests on Autocorrelation	59
4.4.5 Stationarity Test.....	59
4.5 Correlation Analysis.....	60
4.6 Hausman Test for Model Specification.....	61
4.7 Regression Results	62

4.7.1 Regression Analysis before moderation	62
4.7.2 Regression Analysis after moderation	64
CHAPTER FIVE	67
DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	67
5.1 Introduction	67
5.2 Summary of the Main Findings	67
5.3 Discussion of Findings	67
5.4 Conclusions of the Study	69
5.4.1 Board Characteristics and Cash Conversion Cycle	69
5.4.2 Firm Characteristics and Cash Conversion Cycle	69
5.4.3 Board Characteristics, Firm Characteristics Inflation and Cash Conversion Cycle	70
5.5 Recommendations for Practitioners and Policy Makers	70
5.5.1 Recommendations for Policy and Practice	70
5.5.2 Recommendations for Theory	71
5.6 Limitations of the Study	71
5.7 Research Areas for Further Study	72
5.8 Chapter Summary	72
REFERENCES	73
APPENDICES	82
Appendix I: Data Abstraction Tool	82
Appendix II: Work Plan	83
Appendix III: Research Budget	84
Appendix IV: Target Population	85
Appendix V: Letter from Strathmore University	91
Appendix VI: NACOSTI Permit	92

LIST OF TABLES

Table 2.1: Summary of Literature Review and Research Gaps.....	40
Table 2.2: Operationalization of Study Variables.....	46
Table 4.1: Descriptive Analysis.....	56
Table 4.2: Normality Tests	57
Table 4.3: Multicollinearity	58
Table 4.4: Heteroskedasticity Test.....	58
Table 4.5: Outcomes for Autocorrelation	59
Table 4.6: Levin Lin Chu Unit Root Test.....	59
Table 4.7: Correlation Analysis	60
Table 4.8 Hausman Test	62
Table 4.9: Random-effects Regression Model before moderation	63
Table 4.10: Random-effects Regression Model after moderation.....	64



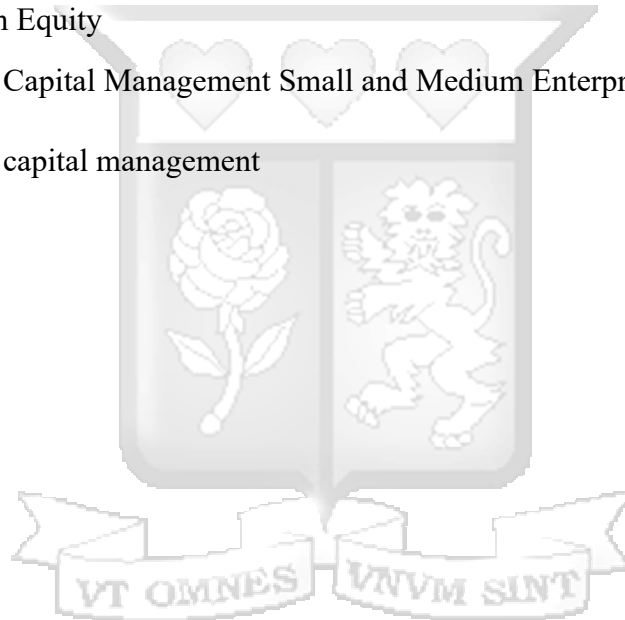
LIST OF FIGURES

Figure 1. 1 Liquidity of Listed Firms.....	5
Figure 1. 2 Board Characteristics.....	7
Figure 1.3 Firm Size	11
Figure 2.1 Conceptual Framework	45



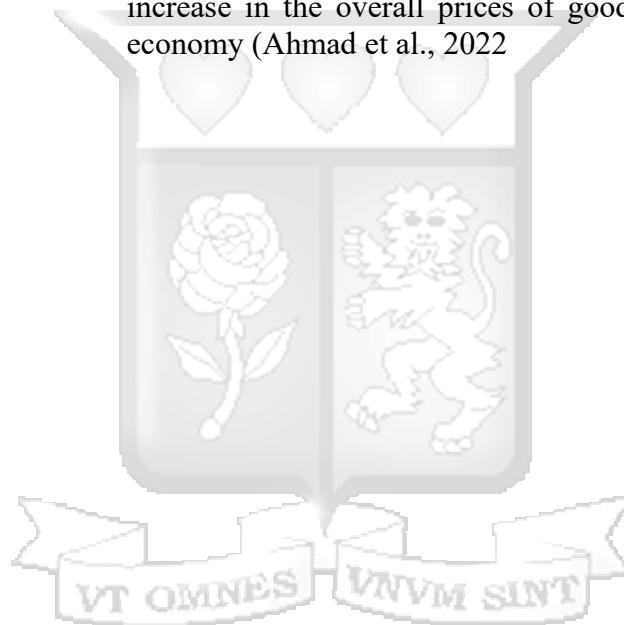
LIST OF ABBREVIATIONS

CCC	Cash Conversion Cycle
CMA	Capital Markets Authority
CPI	Consumer price index
ICP	Inventory Conversion Period
NSE	Nairobi Securities Exchange
PCP	Payable Conversion Period
RCP	Receivable Conversion Period
ROA	Return on Assets
ROE	Return on Equity
SME	Working Capital Management Small and Medium Enterprises
WCM	Working capital management



DEFINITION OF TERMS

Cash Conversion Cycle	According to Temtime (2016), the cash conversion cycle is defined as the time period that elapses between the payment of raw materials and the receiving of account receivables.
Corporate Governance	It refers to the framework that is responsible for the direction and control of businesses (Nguyen, 2011).
Firm Characteristics	According to Barney and Clark (2014), the variables that make up firm-level characteristics are financial resources, technological capabilities, management abilities, human resources, and firm size.
Inflation	It is common practice to use the consumer price index as a measurement tool for inflation, which is defined as an increase in the overall prices of goods and services in an economy (Ahmad et al., 2022)



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Cash Conversion Cycle (CCC) is a metric that measures how long it takes a company to convert its initial investment in inventory and other resources into cash from sales. A shorter CCC generally indicates better liquidity and more efficient cash flow management (Chang, 2022). Additionally, according to Deloof (2003), a corporation that has a higher liquidity can speed up the process of distributing money to viable enterprises, which in turn increases the value of the investments made by its shareholders. This is because the amount of funds that are allocated to viable enterprises is increased. This is due to the fact that increased liquidity enables the organization to distribute funds in a more expedient manner. The reason for this is because the corporation is able to distribute funds in a more expedient manner, which provides the explanation for this. It is necessary to compute the net working capital in order to provide an accurate assessment of the effectiveness of the management of working capital. To evaluate whether or not they are effective, it is necessary to do this evaluation. In order to do this, a deduction of current liabilities from current assets is the approach that is utilized (Huynh, 2011).

A strong board can ensure that management is effectively managing the CCC and related working capital decisions (Affes & Jarboui, 2023). Hermalin et al. (2003) explain that the board of directors is the primary structure of corporate governance that is accountable for supervising and advising senior management in their duties to protect shareholder interests. This responsibility falls under the board's purview. This responsibility is classified as "corporate governance," which is a group of responsibilities. This is because there is a potential that shareholders, directors, and management all have competing interests in the company. This is the reason why this is the case. The fact that this mechanism is accountable for monitoring senior management and giving them guidance is the reason why this is the case.

Waithaka et al. (2013) state that research has demonstrated that the features of a board of directors can be utilized to make predictions regarding the success of a company by applying such characteristics. This idea is supported by the findings of the research. The fact that such

traits can be utilized is evidence that showed this to be true. Due to the fact that the board of directors ought to make an effort to synchronize the incentives of managers and directors with those of shareholders, the characteristics of the board have been a subject of research in the field of corporate finance. This is because the board of directors is responsible for ensuring that the shareholders' interests are met.

Karim et al. (2023) gathered data from 61 Dhaka Stock Exchange (DSE)-listed companies across 10 different manufacturing sectors in Bangladesh over an 18-year period, from 2003 to 2020. They found that lowering the time it takes to convert inventory, shortening the time it takes to collect accounts receivable, and paying creditors with possible delays could all help Bangladeshi manufacturing companies become more profitable. Financial leverage and asset turnover are two firm-specific factors that have a big impact on the cash conversion cycle. The profitability of SMEs in Sweden is found to be considerably impacted by CCC. Size, age, industry affiliation, and firm-level factors all have a big impact on CCC.

The CCC management provides pertinent information about the firm's operational strategies in Latin American countries such as Argentina, Brazil, Chile, Colombia, Mexico, and Peru (Zeidan & Shapir, 2017). This is because these firms operate in an environment where access to external resources is severely restricted (Moshirian et al., 2017; Larkin et al., 2018). Due to the inadequate levels of protection of investors' property rights, working capital also functions as a sort of cash replacement in these countries (Chang, 2022). Inappropriate conversion of working capital into cash, for instance, allows managers or controllers to siphon off money from the company; nevertheless, certain rules and regulations may not completely protect the rights of other stakeholders. Findings from a sample of 467 Latin American companies indicate that higher CCCs result in lower operating cash flow production and higher financial risk, which also suggests a lower firm market value (Chang, 2022).

The corporate profitability of ICT companies listed on the Nigerian Stock Exchange floor was found to be significantly positively correlated with the cash conversion cycle in Nigeria. According to Zakari and Saidu (2016), this demonstrated that the cash conversion cycle had a positive impact on the performance of Nigerian ICT companies. According to Oseifuah (2016), there is a negative correlation between business profitability and working capital management in South Africa, as well as between profitability and the conversion periods of inventories and accounts receivable. However, it is shown that there is a favorable correlation between profitability and the accounts payable deferral period (PDP).

In Kenya, the cash conversion cycle and profitability were found to be significantly correlated negatively by Ruguru (2023). By increasing operating efficiency, lowering borrowing costs, and improving cash flow, a shortened CCC raises profitability. A strong positive correlation between cash conversion cycle and ROA was discovered by Mwangi (2019) among manufacturing firms registered on the Nairobi Securities Exchange, suggesting that a higher APP results in higher profitability for these enterprises.

1.1.1 Cash Conversion Cycle

A performance-based metric for assessing a company's working capital management is the cash conversion cycle (CCC) (Asman et al., 2022). One of the most often utilized metrics by companies to assess and measure the risks and benefits associated with liquidity management is the Cash Conversion Cycle (CCC) (Sugathadasa, 2018). It measures the amount of time needed to turn inventory into cash from the time it is bought until it is sold and the loan is settled. CCC is a common measure of working capital efficiency and the cornerstone of efficient working capital management, claim Majeed et al. (2013). The cash conversion cycle (CCC), as defined by Yakubu et al. (2017), is the period of time that a business spends turning its resources into cash flow. It is calculated by subtracting the total time it takes to pay the seller from the total number of days that it has receivables and inventories.

It has been stated by Sadia (2013) that the cash conversion cycle is an all-encompassing statistic that is utilized for the purpose of measuring working capital. This is due to the fact that it sheds light on the disparity that exists between the expenses that are expended for procurement and the revenues that are made from sales. This is the reason why situations are the way they are. In order to explain the distinction between the two components, which is the reason for this, this is the reason why this is the case.

According to the findings of Angahar (2014), the word "time lag" is a phrase that is used to indicate the amount of time that elapses between the payment and the collection of cash. The purpose of this study was to define the term. By deducting the average payment term from the length of sales, expressed in days of inventory, and adding the total number of days of sales outstanding—also known as the average collection period—one can compute the Cash Conversion Cycle (Obalemo et al., 2020). This makes it possible to calculate the Cash Conversion Cycle. If these procedures are followed in the proper order, the Cash Conversion Cycle can be computed. Determining the Cash Conversion Cycle can be accomplished through the use of a specific process. From a business perspective, the objective of this study is to

analyze the function that inventory plays in determining the level of corporate profitability in a retail firm that holds a considerable number of commodities that are linked with investments. Specifically, the study focused on the way in which inventory affects the level of profitability of the company.

According to Elizalde (2003), the cash conversion cycle is a key approach for carrying out cash management. This is due to the fact that it requires a large amount of cash in order to continue being solvent, as well as the ability to maintain a solid financial position in order to fulfill the requirement of repaying the funds that have been used up. This is the reason why this is the case. According to Hanafi (2004), the currency conversion cycle is a quantitative statistic that is utilized by management in order to accomplish the purpose of measuring the efficiency with which a company manages its working capital. This objective is accomplished via the utilization of the currency conversion cycle. To accomplish the goal of finishing the evaluation, this statistic is utilized in order to satisfy the aim. In the event that this approach is put into action, it was able to carry out an analysis of the method in which a company manages its working capital in a manner that is exceptionally efficient. A business that has a cash conversion cycle (CCC) that is lower than average is more efficient than a business that has a CCC that is higher. This is as a result of the fact that the organization is able to turn over its working capital on a more regular basis within a year.

In light of the fact that the CCC is defined as the ratio of cash to working capital, this is the situation that has presented itself. It is quite likely that it was able to raise both the amount of money it earns from its working capital and the amount of money it makes from its sales as a result of this. This is because of the fact that it is able to raise both of these amounts of money (Wang, 2018). When discussing the subject of corporate finance, the primary focus is on the strategic allocation of money over both the short term and the long term, as well as the decision-making process regarding dividends and investments. This is because these are the two most important aspects of the field. Specifically, this is due to the fact that they are the areas that receive the majority of the focus. Smith (2002) is of the belief that the management of working capital is of the utmost significance since it has a direct influence on the profitability of the organization as well as the risk that it faces. This is because the management of working capital has a direct impact at the same time. Having said that, this is in spite of the fact that the prerequisites that were indicated earlier are present.

According to Ali (2013), around one-third of the businesses, which included eight of those that made a profit in 2015, experienced a decline in their revenues. This was the case for eight of the most profitable enterprises. It is evident that the situation has not yet improved because the National Stock Exchange (NSE) witnessed a decline in liquidity for its top 10 listed equities in 2022 as compared to the previous year. This implies that the situation has not yet improved. In light of this, it is clear that the situation has not yet stabilized. As indicated by the data that was supplied by CMA (2023), the average annual liquidity ratio dropped from 10.98 percent in 2021 to 8.67 percent in 2022. This decrease occurred between the years 2021 and 2022. It was in the year 2021 that this shift took place when the ratio was present. Here, a smaller percentage of the total is depicted. Only two counters were able to maintain their liquidity ratio at a level that was greater than twenty percent for a period of two years in a row. This was a remarkable achievement. The liquidity ratio of eight (8) distinct firm stocks in 2022 was lower than ten percent, which is evidence that there was an extra drop in liquidity. This is proved by the fact that the liquidity ratio was lower than ten percent. A bad Liquidity Ratio is one that is below 1.0, indicating that the company does not have enough current assets to cover its short-term liabilities. This might indicate a potential cash flow problem and should be monitored closely (Bintara, 2020). When compared to the liquidity ratio of six (6) stocks in 2021, this shows an increase to the level that is currently being used. Following the completion of the study, it was determined that the liquidity issue was the primary reason for the prolonged cash flow difficulties that were particularly prevalent in the manufacturing and construction industries.

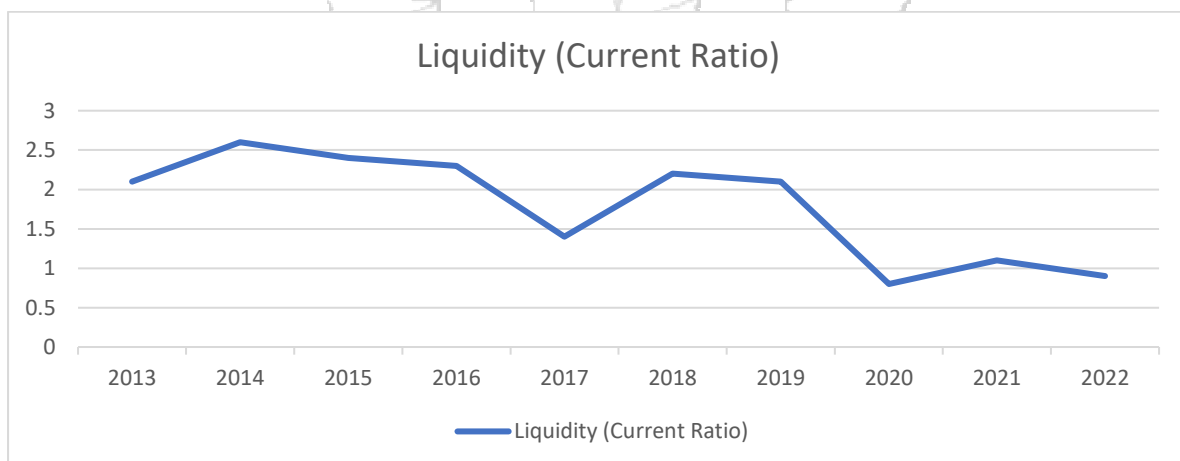


Figure 1. 1 Liquidity of Listed Firms

Source: NSE Report (2024)

According to the information that is displayed in figure 1.1, the liquidity of the companies that are listed on the National Stock Exchange (NSE) has been fluctuating over the course of the past ten years. The year 2014 was the year that registered the highest liquidity as compared to the other years that have occurred during this time period (Kimutai, 2023). In the year 2020, there was a huge decrease in liquidity, which was mostly caused by the impact of the COVID-19 pandemic. This phenomenon was responsible for the significant reduction. The year 2017 (1.4) and the year 2022 (0.9) were two additional years that showed poor performance, which may be attributed to the dangers that are associated with a general election. It was in the year 2022 when both of these occurrences took place. Furthermore, the month of 2021 displayed a liquidity level of 1.1, which was a substantial difference from the previous month. The liquidity of publicly traded corporations has been steadily decreasing over the course of the previous decade. This trend has been observed in virtually all companies. There has been a constant observation of this pattern. Another measure of liquidity is quick ratio. In addition, quick ratio of the NSE firms have been declining (Irungu, 2019).

Huynh (2011) has stated that the immediate operational operations of a company will result in patterns of cash input and outflow that are irregular and unpredictable. This is something that will happen because of the nature of the business. The acquisition of inventories, the payment of expenses for manufacturing and producing supplies, the marketing and sale of finished items, and the collecting of payments from customers are all included in these operations. These activities are all a part of the operations that are being carried out. A stoppage in the flow of resources, such as a worldwide illness outbreak or a tragic catastrophe inflicted by nature, may result in an increase in the CCC as a consequence of the difficulty that businesses have in acquiring essential raw materials. This is because of the fact that those businesses are unable to acquire the raw materials they need. It is possible that the fact that companies are having a hard time procuring these resources is the root cause of this problem. The fact that businesses are unable to acquire these resources is the aspect that has contributed to the current state of affairs with regard to this predicament. Due to the fact that the company has a significant number of days payable outstanding (DPO), which is an abbreviation that stands for days payable after the due date, the company has a tendency to delay making payments to its suppliers.

1.1.2 Board Characteristics

As per the agency theory, there are a variety of various approaches that can be taken in order to decrease the impact that agency conflicts have within businesses. These approaches can be

implemented in order to achieve this goal. According to Drakos et al. (2007) the capital structure, the ownership structure, and the board of directors are all examples of components that are included in the definition of corporate governance. Additionally, the term also includes the board of directors. Nguyen (2011) asserts that boards of directors play a significant part in ensuring that a healthy equilibrium is maintained between control and incentive in an organization. These committees have the authority to decide not only the level of administrative authority that they hold but also the system of rewards that are granted to managers. Both of these aspects are subject to the committees' authority to decide. They are responsible for making a crucial and highly visible business choice, which is whether or not to hire new managers and whether or not to fire others.

According to Aifuwa and Embele (2019), board characteristics are one internal corporate governance method that elaborates on the board's attributes. According to Aifuwa and Embele (2019), the board's attributes include diversity (age, gender, nationality, competence, educational background, and functional background), size, and independence. According to Muchiri (2016), the term board characteristics refers to the distinct and unmistakable traits that are owned by a specific board of directors. These characteristics are possessed by the board. These characteristics are the ones that the board possesses. When it comes to establishing the ideal combination of attributes for each board, it is essential to take this one into mind. The characteristics of the board include a variety of aspects, including the diversity of the Board of Directors (BOD), the presence of an Audit Committee, the dual nature of the Chief Executive Officer (CEO), the independence of the BOD, the size of the BOD, the compensation of the BOD, and a number of other aspects (Finegold et al., 2007).

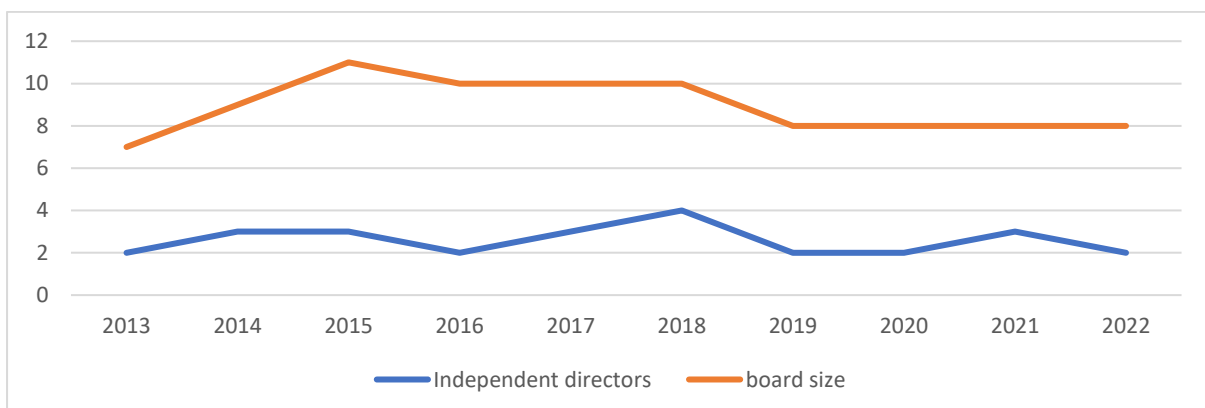


Figure 1. 2 Board Characteristics

Source: Researcher (2025)

As the figure that has been presented demonstrates, the number of independent directors and the average size of the board have both been subject to change over the course of the past ten years. This is something that can be observed. It has been taken into consideration that this is the case. According to the information that was gathered in 2013, the average number of independent directors that each firm had was Independent Directors, and the average number of members that made up the board was five. In the year 2015, the average number of directors serving on the board of directors was eight, while the average number of independent directors that were present in each company was three. It is possible to get the conclusion that the makeup of the board during that particular year was ideal after taking all of this into consideration.

In accordance with the findings of EmadEldeen et al. (2021), the concept of board diversity comprises all of the following: the aggregate backgrounds, demographics, abilities, competencies, and experiences of the directors who serve on a board. According to the upper echelons hypothesis, the existence of a diverse board of directors improves the board's ability to discover strategic options, establish efficient strategies, handle conflicts, and improve the overall performance of the organization (Hsu et al., 2019). This is because the board is better able to distinguish between different strategic solutions. Furthermore, having a diverse board increases the board's access to knowledge because of the increased diversity that may be found on the board.

According to information provided by Kagzi and Guha (2018) there are two primary levels of diversity that may be found on boards of directors. First, there is a distinction in the structure, which is subsequently followed by a distinction in the demography of the people. Next, there is a difference in the population's composition. According to Kagzi and Guha (2018), the characteristics of structural diversity include the size of the board, the dual position of the CEO, and the autonomy of the board. All of these characteristics are crucial components of structural diversity. In addition to this, he asserted that the demographic diversity of the board included a wide range of factors, including gender, nationality, educational accomplishment, and age diversity, among others. In response to the comment that came before, he made this statement. One piece of evidence that demonstrates the company's commitment to having a diverse workforce is the fact that the board of directors of the company is made up of individuals who come from a variety of different backgrounds. As a result, this draws in individuals who themselves come from a wide range of varied backgrounds (Hsu et al., 2019).

According to Rejeb et al. (2020), independent directors have the chance to provide objective opinions and actively participate in board debates. This is because they serve as representatives

of shareholders on the board of directors. In this regard, the presence of independent directors on the board of directors is the reason. Self-sufficient persons are expected to ensure that their appearance and performance are not impacted by anybody within the organization or management, as stated by the findings of Rejeb et al. (2020). This obligation is based on the fact that self-sufficient individuals are self-sufficient. It is the responsibility of the corporation to appoint independent directors, who are tasked with the responsibility of overseeing the activities of executive directors and top management. As a consequence of this, they would prioritize the interests of shareholders by boosting the value of the investments that they have already made. This action would be taken in order to protect their interests and ensure that they are protected. During the course of his essay that was published in 2010, Zinkin makes the recommendation that independent directors ought to take into consideration a wide variety of variables that have an impact on the process of defining the strategy for the business.

1.1.3 Firm Characteristics

Firm characteristics, according to Dogan (2013), are elements that management primarily controls. Firm size, liquidity, leverage, sales growth, and age are among the firm characteristics. According to Musamali et al. (2023), the definition of firm characteristics is parameters that are unique to the company. In addition to age, size, ownership structure, and industry, these criteria take into account a variety of other variables as well. According to Kogan and Tian (2012), the list of characteristics of a firm includes a variety of diverse factors that are included in the list. These characteristics include the size of the firm, the amount of debt that the company uses, the liquidity of the company, the growth of sales, the expansion of assets, and attrition. Additionally, these characteristics include the growth of assets. The ownership structure, the qualifications of the board, the age of the company, the distribution of dividends, the profitability, the access to financial markets, and the possibility of expansion are some of the additional variables that are taken into consideration (McKnight et al., 2008; Subrahmanyam et al., 2001). These are just some of the variables that are taken into consideration.

One of the most important factors that plays a role in deciding the length of time that the Cash Conversion Cycle takes to complete is the size of the organization. This is a point that is sometimes overlooked. There is a substantial degree of variability in the connection that exists between the expansion of a company and its liquidity and profitability, as indicated by research that is both theoretical and empirical (Yadav et al., 2021). This is the conclusion that can be

drawn from that research. Amato (2004) state that the conventional association between scale and profitability, which is shown in industrial companies, does not hold true for retailing businesses. This is the conclusion that they reach after doing their research. This is due to the fact that enterprises in the retail sector are not impacted by scale. This is because retail businesses are smaller in size compared to manufacturing firms, which is the reason why this particular phenomenon occurs.

Goddard et al. (2005) came to the conclusion that the size of a company has a negative link with the profitability of the business. This discovery came about as a result of their analysis. This phenomenon was observed for businesses operating in the industrial and service sectors in the countries of Belgium, France, Italy, and the United Kingdom between the years 1993 and 2001. Furthermore, this phenomenon was observed for enterprises in the United Kingdom. The findings of Gschwandtner (2005), on the other hand, suggest that larger businesses in the United States have higher rates of long-term profit that they have achieved. There was a positive correlation between profitability and scale among around 7,000 publicly traded companies in the United States between the years 1987 and 2006. The findings of a later study that was carried out by Lee (2009) revealed empirical evidence that gave support for the presence of this link. During the course of this research effort, the years 1987 through 2006 were brought into consideration. When it comes to huge corporations, it is becoming increasingly typical for them to rely on directors who are not linked with the corporation. When defining the size of a firm, the total assets and net revenues of the company are the two different criteria that are taken into consideration. Firm size and firm age are adopted in this study since they have been shown in the liquidity preference theory to be related to liquidity of the firm and hence may have an effect on the cash conversion cycle.

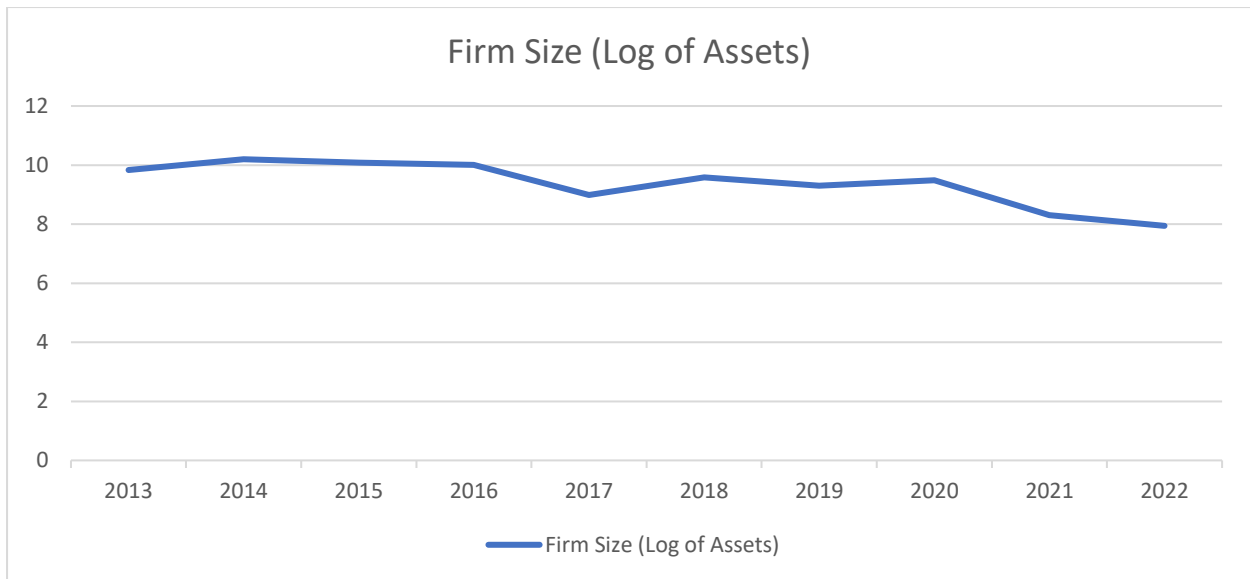


Figure 1.3 Firm Size

Source: NSE Report (2023)

The average size of the businesses that were entered into the database was 9.8342 in the year 2013, and by the year 2014, that number had climbed to 10.1974. The information is presented to the reader in the table that can be found above which contains this information. The average size of businesses had reduced to 10.0836 by the end of the year 2015, and by the end of the year 2016, it had dropped even further to 10.0017. This decline occurred within the span of just two years. In 2022, when it was measured at 7.9421, the average size of enterprises reached its lowest point. This was the year that it reached its lowest point. This value was the lowest that has ever been documented. From 2013 to 2022, there has been a general decline in the total assets of listed corporations, which has resulted in a downward trend in the size of the business. This decline has led to a decrease in the size of the firm. The years 2013 through 2022 have been the time period in which this particular trend developed.

The factors that influence the profitability of industrial companies in Jordan were the subject of an analysis that was carried out by Matar et al. (2018). Both the conclusions of their investigation and the findings of their research are consistent with one another. As an additional point of interest, secondary data was collected from publicly traded companies beginning in the year 2005 and continuing until the year 2015 for the purpose of this study. The findings of the study, which were based on regression analysis, indicated that the utilization of financial leverage and the size of the organization both had a detrimental impact on the levels of earnings. By the end of the research, this was the conclusion that was reached. The outcomes

of the study indicated that the return on assets (ROA) was positively influenced by liquidity, profitability, and revenues. This was the conclusion reached by the researchers. It was proved that this was the case over the course of the inquiry. A contextual void was discovered as a result of the investigation that was carried out on Jordanian manufacturing businesses, as stated by the findings of the inquiry that was carried out over the course of the investigation.

1.1.4 Moderating Role of Inflation Rate

Price increases for products and services are referred to as inflation. A firm's liquidity and, consequently, the cash conversion cycle may be impacted by inflation, which is known to lower the real worth of money. Because inflation may have an impact on the way firm and board characteristics influence the cash conversion cycle, it is examined in this study as a moderating variable (Ali, 2024). It is generally accepted that inflation is the most significant macroeconomic driver during the ongoing economic crisis that is affecting both highly developed nations and nations that are still in the process of developing. This crisis is having a negative impact on both parties. This is because it is projected that inflation would continue to rise, which is the reason for this conclusion. There has been an increase in the prices of goods and services, which can be ascribed to the higher prices, as a result of the rise in inflation rates. This increase can be linked to the higher prices (Ahmad et al., 2024).

Mathuva (2014) stated that the CCC is influenced by elements that are specific to the company in addition to those that are of a macroeconomic character. The study that Simon and his colleagues (2019) conducted with the intention of finding the impact that inflation rates have on the connection that exists between the management of working capital and the profitability of businesses was carried out with the purpose of determining the influence that inflation rates have. The findings of the study lead the researchers to the conclusion that working capital management (WCM) improves the overall performance of enterprises in the context of conditions that are characteristic of the macroeconomic environment.

As mentioned by Mathuva (2014) in the article, the CCC is influenced by a variety of factors, including those that are unique to the company as well as those that are associated with the economy as a whole. These factors include those that are tied to the economy as a whole. There was a study that was carried out by Mathematics (2014) with the purpose of evaluating whether or not non-financial companies who were listed on the Nairobi Securities Exchange (NSE) had a target for cash conversion cycle (CCC). CCC was found to have a substantial negative connection with return on assets, investment in capital expenditures, and growth potential, as

demonstrated by the findings of the study. This was shown to be the case after the outcomes of the study. Although this is the case, the findings of the research carried out by Simon et al. (2019) and Mathuva (2014) are in agreement that the rate of inflation has an impact on the connection between working capital management (WCM) and the performance of businesses.

1.1.5 Nairobi Securities Exchange

In 1954, European stock dealers created the Nairobi Securities Exchange, which was initially called the Nairobi Stock Exchange. The transaction was initially conducted in Nairobi. There was another name for this exchange, and that was the Nairobi Securities Exchange. In the beginning, this private group was established by individuals who were involved in the stock market as investors. The Capital Markets Authority is in charge of regulating the National Stock Exchange (NSE), and it is also accountable for monitoring companies that are listed on the NSE (NSE, 2015). The Capital Markets Authority is responsible for conducting investigations into publicly traded corporations. As an immediate consequence of this, the market has been subjected to adjustments that are not only substantial but also extensive. To achieve its core goal, which is to boost the market's liquidity, the Exchange is dedicated to supporting innovation and ensuring that all players adhere to the highest ethical standards that have ever been established. With this commitment, the Exchange hopes to achieve its primary aim. According to the National Stock Exchange (NSE), this signifies that a greater number of investors have access to information that is not only reliable but also objective for the purpose of making decisions regarding trading opportunities related to the market.

There is a significant contribution that the Nairobi Securities Exchange (NSE) makes to the expansion of the economy of Kenya (NSE, 2019). This is because it makes it simpler for domestic and international firms to obtain capital at a low cost, as well as because it encourages enterprises to preserve money and invest it. Both of these factors contribute to the fact that it is beneficial. It is of crucial importance to the economy since it makes it easier to move financial resources around and distribute them in order to support activities that are productive over the long run. This is why it is so important. This is due to the fact that it makes it simpler to move financial resources from one place to another. The result of this is that it actively stimulates the economic development of the nation and makes a contribution to the development of the nation's economy. This served as the primary driving force for the creation of the Capital Markets Authority of Kenya, an organization entrusted with the careful observation of the expansion and advancement of the capital markets. On the other hand, the NSE, which is the

primary stock exchange in Kenya, has a dual role. It is responsible for ensuring that trade is conducted in an efficient manner through regulation, and it is also responsible for encouraging the expansion of the market. Furthermore, it is accountable for ensuring that the market is appropriately controlled in the appropriate manner.

An extensive number of publicly traded companies have been put on a list of corporations that the Capital Markets Authority (CMA) has determined to be deserving of close monitoring. This list includes a considerable number of companies. This choice was taken in response to concerns regarding the availability of money and the manner in which businesses are managed. The decision to make this choice was made. In addition, there is a possibility that the trading of the stocks of these firms might be interrupted, and there is also a possibility that they might eventually be removed from the list of corporations that are publicly traded. Both of these possibilities are possible. There are now eight companies that are listed on the stock exchange in Nairobi as a result of this development (Charter Management Association, 2022).

1.2 Statement of Problem

The Cash Conversion Cycle (CCC) measures how long it takes a company to convert its investments in inventory and other resources into cash. For NSE companies, the Cash Conversion Cycle (CCC) is essential because it shows how well they can turn investments into cash, which affects their liquidity, profitability, and general financial well-being. A shorter CCC is a crucial metric for investors and management alike since it typically denotes increased financial performance and operational efficiency (Mwangi, 2019).

The listed companies on the NSE are not exempt from the cash conversion issue. In 2022, the NSE observed a decrease in liquidity for its top ten listed equities compared to 2021, indicating that the situation has not yet improved (Irungu, 2019). According to the CMA (2023) data, the average cash holding was 0.0891 in the year 2019 but declined to 0.0768 in the year 2020 and further declined to 0.0678 in the year 2022. Companies with a short cash conversion cycle have greater cash holdings and therefore the protracted cash flow difficulties, particularly in the manufacturing and construction industries, were attributed to the liquidity issue.

The CCC problems have been majorly associated with lack of independent directors in most NSE firms. A lack of independent board directors can negatively affect a firm's cash conversion cycle, potentially lengthening it and hindering profitability of firms (Nwude et al., 2018). Further lack of board diversity have also hindering effective working capital management and

potentially leading to suboptimal cash holding. Yadav et al. (2021) also indicated that one of the most important factors that plays a role in deciding the length of time that the Cash Conversion Cycle takes to complete is the size of the organization. Further the general rise in inflation in the country have led to the lengthening of NSE firms cash conversion cycle (CCC) by increasing the time it takes to convert inventory into cash, and potentially also by increasing the cost of borrowing.

The study conducted by Moustafasoliman, et al. (2018) specifically examined the financial performance of Egyptian enterprises, highlighting a void in the existing framework in terms of the concept used as a dependent variable which was financial performance and the context of the study. Additional research conducted on companies in other industries includes, Muhindi et al. (2018), Gill et al. (2015) and Kajola et al. (2017). In addition, Mathuva (2014), Ajanthan and Kumara (2017) have concentrated on determinants of cash conversion cycle but have not focused on the effect of board and firm characteristics on cash conversion cycle in Kenyan non-financial listed firms: moderated by inflation rate and hence a knowledge gap that this study has researched upon.

Other research employed distinct approaches, resulting in a methodological gap. Tonui et al. (2018) employed a descriptive survey design, while Waithaka et al. (2013) utilized an explanatory research design. In order to address the discrepancy, this study employed a correlational research approach. The current study focused on correlational research design. Furthermore, other investigations yielded conflicting outcomes, resulting in an empirical void. For example, Kantudu, et al. (2016), Kamau et al. (2013), and Rana et al. (2017) discovered conflicting outcomes, resulting in an empirical void that this study aims to address. Other studies found no correlation between the variables of interest and CCC. Al-Matari (2022), Munyradadzi et al. (2016), Isik et al. (2016), Ujunwa (2012), Takon et al. (2015), and Samosir (2018) failed to establish a connection between the research variables and CCC, resulting in a conceptual gap. This shows the existence of a knowledge gap which can be improved by investigating similar studies in different contexts, using different concepts and methodologies. To bridge the aforementioned gaps, this study sought to establish the effect of board and firm characteristics on the cash conversion cycle of Listed Firms in Kenya with an aim of bridging these gaps.

1.3 General Objective

The general objective was to establish the effect of board, firm characteristics and cash conversion cycle in Kenyan Listed Firms, moderated by inflation rate.

1.3.1 Specific Objectives

- i. To examine the effect of firm characteristics on the cash conversion cycle of Listed Firms in Kenya.
- ii. To assess the effect of board characteristics on the cash conversion cycle of Listed Firms in Kenya.
- iii. To investigate the moderating role of inflation rate on the relationship between board characteristics and firm characteristics on the cash conversion cycle of Listed Firms in Kenya.

1.4 Research Questions

- i. What is the effect of firm characteristics on the cash conversion cycle of Listed Firms in Kenya?
- ii. What is the effect of board characteristics on the cash conversion cycle of Listed Firms in Kenya?
- iii. What is the moderating role of inflation rate on the relationship between board characteristics and firm characteristics on the cash conversion cycle of Listed Firms in Kenya?

1.5 Scope of the Study

The purpose of this study was to evaluate the effect of board and firm characteristics on the cash conversion cycle of listed firms in Kenya. The scope of this study was determined by the setting in which it is conducted. The study focused on 45 non-financial listed firms since financial firms like commercial banks and insurance companies measure CCC in a different manner from non-financial firms. The liquidity preference theory and the cash conversion cycle theory were both incorporated within the theoretical scope of the study. The research uses data from publicly traded companies in Kenya as its sample area. The panel data for the study was collected from 2019 through 2023.

1.6 Significance of the Study

This study was important to a wide variety of stakeholders, such as banks, the CBK, lawmakers, businesses, and academics.

1.6.1 Managers of NSE

The managers of NSE can significantly benefit the management of Nairobi Stock Exchange (NSE) firms. They will be able to understand the factors that influence their Cash Conversion Cycle. By understanding the CCC, managers can optimize working capital management, improve cash flow, enhance profitability, and make better investment decisions

1.6.2 Investors

Since the capital market determines the prices of securities based on reported firm performance, the findings of this study might be useful to investors and lenders because they may shed light on the effect of a particular operational style of firms' management in balancing the interests of managers and shareholders. This is because the study might shed light on how companies protect their interests.

1.6.3 Researchers

In light of the paucity of prior knowledge in the same area, it is possible that the results of this study could serve as a reference for future researchers. Similarly, academicians interested in expanding their understanding of the firm-level factors that influence the CCC of NSE-listed firms might find this study to be of great value.

1.6.4 Policy Makers

This study might be instructive for regulators like the CBK because institutions like the Capital Market Authority might use the findings. It is anticipated that the results might enhance comprehension of the policies required to improve the ccc of listed companies. It is also anticipated that the findings might result in the creation of policy guidelines that would, in general, promote market regulation of businesses.

1.7 Chapter Summary

The chapter has outlined the background of the study. The chapter has also outlined the statement of the problem, general objective and the research questions. The chapter also contains the scope of the study and the significance of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A literature analysis was presented at the beginning of this chapter. This study investigated the prevalent theories concerning the features of boards of directors and firms, as well as the cash conversion cycle. The second segment takes a look at prior research that was carried out by a variety of experts and investigates the association between the cash conversion cycle and the characteristics of the board of directors and the corporation. The chapter is then finished by offering a review of the relevant literature, an evaluation of the gaps in the relevant research, and an elaboration of the conceptual framework.

2.2 Theoretical Reviews

Following is a list of theories that served as the foundation for the theoretical review that might be carried out by this study. These theories provide support for the concepts of the board, the firm, and the cash conversion cycle. Among the various theories that are taken into consideration are the Resource Dependency Theory and the Liquidity Preference Theory.

2.2.1 Liquidity Preference Theory

The hypothesis that is now often referred to as the Liquidity Preference hypothesis was initially conceived of and developed by John Maynard Keynes in the year 1936. The liquidity preference theory proposes that people have a greater propensity to keep cash in a form that is easily accessible rather than investing it. This is in contrast to the traditional investing strategy. In contrast to the typical tendency to invest cash, this is the opposite of that. Individuals, on the other hand, have a tendency to allocate capital for investing objectives to take advantage of. It was in the article that Keynes authored in 1936 that he asserted that the link between the supply of money and the demand for it is the most important factor that determines interest rates. Those persons who choose not to hold liquid assets in their possession are able to receive interest rates as a form of compensation, according to Keynes (Ogiriki, & Andabai, 2014).

One of the arguments that he makes with reference to interest rates is as follows. A belief that is consistent with this perspective is the idea that cash is the asset that can be transformed in the shortest period of time and with the least amount of work (Chick, 2019). According to Gauti (2008), the LPT appears to favor investments that are made for a short period of time. Short-

term investments are able to supply investors with liquidity, and they also have lower interest rates than long-term investments. This is the reason why this is the consequence. Investments with medium and long-term durations result in higher interest rates. This is because such assets offer a lack of liquidity, which is a factor that contributes to the higher interest rates. These investments are held for extended periods of time, which is the reason behind this.

According to Panico (2018), the idea that Keynes proposed has been the target of a significant amount of criticism due to its controversial nature. However, the theory accepts that other factors, such as the rate of interest, have a significant influence in setting the rate of interest. These other elements include capital productivity and thriftiness. Despite the fact that the theory asserts that the rate of interest is largely a financial phenomenon, this is the scenario that has occurred. The idea is based on an assumption that is not accurate, which is that the demand for investment funds and the interest rate are not related to one another in any way. This is an assumption that cannot be true.

On the other hand, the necessity for investment money has a significant impact on the situation when it comes to the cash balances of professionals in the business world. To add insult to injury, the theory does not provide an explanation for the fact that the market is defined by the presence of a number of interest rates at the same time. Furthermore, it is only concerned with interest rates that are over a short length of time, and it does not take into account any interest rates that are over a longer period of time. This is because it is a short-term interest rate. According to Parguez (2016), the theory does not have a substantial amount of empirical data to prove that it is viable in a true monetary system. This is the conclusion that can be drawn from the investigation. Within the context of his argument, this is the primary point that he emphasizes.

In the context of the economy, Keynes contends that money serves a purpose that is not only observable but also substantial. He refers to this purpose as "the function of money." According to Eggertsson (2008), the liquidity component of an investment is of substantial value since the goal of economic activity is to maximize the amount of financial gain that may be obtained. This is the reason why the liquidity component of an investment is particularly important. As a result, the liquidity component of an investment is of the utmost importance. When it comes to calculating the optimal liquidity requirements of enterprises that operate in a wide variety of industries, the liquidity preference theory is beneficial. This is despite the fact that it is presented with a number of obstacles. According to this idea, people store money or commodities for a variety of reasons, including transactional, speculative, precautionary, and

compensating goals (Chick, 2019). These are the reasons that are cited in the theory. A firm must have sufficient working capital in order for it to be able to carry out the day-to-day operations that are expected of it. This is an essential requirement for the company to be able to fulfill its obligations. According to Abuzayed et al. (2019), in order for businesses to ensure that their commercial activities are carried out without any interruptions, they are required to provide themselves with sufficient cash for their existing assets. This is the only way for them to guarantee that their activities are completely smooth.

The liquidity preference theory, which posits that people prefer holding liquid assets (like cash) and require higher interest rates to hold less liquid assets (like bonds), can be indirectly linked to the cash conversion cycle (CCC) because a shorter CCC suggests more cash flow, leading to a greater desire to hold cash, thus reducing liquidity preference. In addition, the theory's stated motivations apply to Kenyan listed companies, which need to keep a specific working capital margin in order to support their daily operations. The notion states that listed companies should have cash on hand to pay for things like employee compensation and the acquisition of raw materials. Listed companies should keep enough cash on hand to cover urgent expenses as a protection against potential fines. Larger and more established listed companies are therefore able to maintain high liquidity.

2.2.2 Resource Dependency Theory

Pfeffer et al. (1978) with the intention of determining the extent to which external resources have an effect on the behavior of organizations. This is the theory's primary purpose. The year 1978 saw the publication of this idea. In accordance with the advice given by the authors, adjustments ought to be made, and businesses ought to involve themselves actively in interactions with the external environment in which they currently find themselves. Because of this, organizations were able to acquire the resources that are essential to their continuous existence, which secured their continued existence. For the purpose of achieving this objective, it is of the utmost importance to adhere to the core premise of resource dependence theory in order to establish external linkages as effectively as possible between a firm and external resources. The directors of a company are tasked with the obligation of ensuring that the firm is successful over an extended period of time by purchasing and hiring the necessary resources (Salancik et al., 1978). This approach places the responsibility of ensuring the company's success on the shoulders of the directors. The purpose of this action is to improve the way in which the company interacts with the factors that are external to it. Directors of organizations have access to a wide variety of resources, including information, skills, and vital stakeholders

(suppliers, purchasers, and those who make decisions regarding public policy, social groupings, and legality), as supported by the resource dependency theory. These resources include knowledge, skills, and essential stakeholders. These resources include not only information and expertise but also crucial stakeholders and other relevant parties. It has been stated by Gale et al. (1994) that the utilization of these resources as evidence is utilized in order to achieve the objective of lessening the impact of situations that are unknown. The resource dependence theory suggests that boards that are made up of a large number of individuals should have extra directors appointed to their positions. The reason for this is that these directors have more opportunity to establish contacts and acquire experience, which is the reason why this state of affairs exists.

Hillman et al. (2009) have expressed their disapproval of the RDT for a number of different reasons. These reasons include the RDT's inability to differentiate between power imbalance and mutual dependence, its confusion between normative prescriptions and theoretical predictions, its unclear boundary conditions, and its excessive focus on the dependence of one actor on another in empirical studies. However, these are only a few of the many causes that have been mentioned. Several academics have also pointed out that it is practically impossible to conduct empirical tests on all of the assumptions that are offered by the RDT (Nienhuser, 2008). This is something that has been pointed out by academics. Additionally, this is something that has been brought to the attention of a number of academics. A large number of individuals have taken into consideration the significance of this task that has been presented to them. A theory that was produced in the field of organizational studies is called the Resource Dependence Theory. This theory is one of the theories that was developed. The purpose of this theory is to provide an explanation for the actions that organizations take. Having stated that, it is of the highest importance to admit that this theory does not immediately shed light on the activities that take place within an organization (Sharif et al., 2014).

When considered from the perspective of resource reliance, it is commonly accepted that the size of the board comprises a considerable reservoir of resources. This is the consensus among most people. In particular, Danoshana and Ravivathani (2019) found that the findings of earlier research regarding the impact of board size on CCC were inconsistent. This was a problem because the findings of previous research were inconsistent. This investigation has mostly focused on the challenges that the organization is currently facing, and as a result, it has produced results that are not consistent with one another. There is a greater possibility that members of the board demonstrated intellectual, critical, and genuine prudence when the size

of the board is reduced. As a consequence of this, it is likely that this resulted in a significant improvement in the quality of business performance at the general level, as well as a significant improvement in the decision-making process within the corporation, and a better degree of monitoring. One can reasonably anticipate that the Cash Conversion Cycle (CCC) was rather brief. This is a significant probability. In light of the fact that the company has been doing very effectively up until this point, this is the result. Furthermore, a larger board size provides the essential resources, information, skills, and expertise that are required to invest in groundbreaking ideas that have the potential to provide financial benefits for the company (Chen, 2012). This is because those ideas have the potential to produce financial benefits for the company. This is due to the fact that a larger board size offers a greater quantity of these things.

The theory states that because the board of directors has access to important external resources including technology, relevant knowledge, and human and financial capital, it forms the basis of the organization's external environment. These resources could increase the company's credibility and improve the effectiveness of its strategic choices (Garsia, 2020). According to the notion, it is better for a board to be autonomous, comprise women, skilled, and international directors, and have ties to the company's external environment (Ujunwa, 2021).

Thus, this theory is deemed relevant to this study. This is because aids in the explanation of the connection between the cash conversion cycle and board attributes such as independence, diversity, and size. The theory suggests businesses should form relationships to access essential resources, impacting the Cash Conversion Cycle (CCC) by influencing inventory, sales, and payment terms, ultimately impacting cash flow and liquidity. In Kenya, a listed company's cash conversion cycle will be determined by the qualities of its board, which establishes the resources they contribute to the company, including technology, skills, and intellectual capacity, all of which will help the company make decisions about the cash conversion cycle.

2.3 Empirical Literature Review

2.3.1 Board Characteristics and Cash Conversion Cycle

2.3.1.1 Independent Director and Cash Conversion Cycle

The effect of independent directors on the cash conversion cycle of American industrial companies was investigated by Obradovich et al. (2014). The study examined a sample of 189 American manufacturing companies that were listed on the New York Stock Exchange (NYSE) between 2009 and 2013. The results show that manufacturing companies' cash conversion

cycle and inventory time are shortened when independent members are on the board of directors. In contrast to the listed companies in Kenya that were the subject of the current study, the study's focus was on American manufacturing firms thus showing a contextual gap.

Similarly, impact of board independence on business cash holding practices and shareholder value was investigated by Seo et al. (2014). According to the findings, companies that are motivated to have a majority of independent directors on the board have more cash on hand and have seen a rise in the value of cash for shareholders following the SOX. Businesses that were under financial pressure and those that were closely watched by outside parties saw a lower growth in cash holdings. The study's dependent variable was how much cash a company held thus showing a conceptual gap.

In the course of their investigation, Gill et al. (2015) conducted a study with the purpose of assessing the impact that independent directors have on the cash conversion cycle of manufacturing companies in the United States. The purpose of this was to investigate the influence that independent directors had on the organization. Over the course of the year beginning on January 1, 2009 and concluding on December 31, 2013, a total of around seven hundred financial reports were received from publicly traded companies. Based on the research findings, it has been concluded that having independent members on the boards of directors of manufacturing companies shortens the time that inventory is held and the time it takes to convert cash.

Similarly, the question of whether co-opted directors reduce or increase working capital efficiency was investigated by Harris and Hampton (2022). According to by Harris and Hampton (2022) there is compelling evidence that companies with more co-opted boards manage working capital more effectively because they have shorter cash conversion cycles. When all other factors are taken into account, board co-option shortens the cash conversion cycle by roughly -1.2% , whereas independent director co-option shortens the cycle by over -2.0% . These findings hold up even when endogeneity is taken into account, and they hold up well against several cash conversion cycle metrics. Overall, the study supports the claim that co-optation lessens managerial myopia by decreasing the risk of termination, which in turn encourages managers to make wiser investment choices that could increase business competency. Because the study only examined one aspect of board independence thus showing a conceptual gap, it was necessary to examine the idea holistically, which is what the current study performed.

Assenga, Aly, and Hussainey (2018) examined the relationship between board composition and Tanzanian listed companies' financial performance using semi-structured interviews with 12 key stakeholders, balanced panel data regression analysis on 80 firm-year observations (2006-2013) from annual reports, and a mixed methods approach that integrates quantitative and qualitative data using a convergent parallel design. Similar to the previous study finding, the current study findings indicated that board independence had a positive effect on financial performance of Tanzanian firms. The study was done in Tanzania thus showing a contextual gap. The current study was done in Kenya.

In another study, Moustafasoliman et al. (2018) used a sample of 50 more active Egyptian companies listed on the Egyptian Stock Exchange of the non-financial sector over the course of three fiscal years, from 2012 to 2017, to investigate the impact of board of directors characteristics on a firm's financial performance in Egypt. CEO duality, board size, meetings, board member independence, and gender diversity were all used to illustrate the structure of the board of directors. The relationship between corporate governance and the financial performance of the company was investigated using regression analysis and correlation. According to the study, the performance of Egyptian companies is not significantly impacted by the board of directors' structure elements. The current study mostly focuses on enterprises situated in Kenya. In this regard, this is due to the fact that Kenya is the nation in which the bulk of the businesses are situated.

Similarly, Tonui et al. (2018) conducted an analysis to determine the extent to which the characteristics of boards of directors influence the performance of commercial state businesses in Kenya. It has been found that there is a considerable and robust correlation between the features of boards (namely, board transparency, board communication, board disclosures, and board independence) and the financial success of state-owned firms. This connection was identified through research. The study dependent variable was performance of commercial state businesses thus showing a contextual gap. The current study focused on cash conversion cycle.

2.3.1.2 Board Diversity and Cash Conversion Cycle

Ullah et al. (2020) looked into how corporate cash holdings in Pakistan were affected by board diversity, as shown by the gender and military experience of the directors. The OLS approach is used to examine non-financial companies listed on the Pakistan Stock Exchange between 2009 and 2017. The findings indicated a strong inverse link between company cash holdings

and board diversity. Additionally, having a woman as CEO has a detrimental effect on cash holdings. The results also showed that the presence of women as CEOs and military directors (MDs) had a greater effect on cash holdings in state-owned companies (SOEs) and non-state-owned enterprises (NSOEs). In contrast to the current study, which concentrated on other facets of board diversity, the study, which was carried out in Pakistan thus showing a contextual gap, measured board diversity in terms of gender and military experience.

Similarly, Metwally et al. (2024) looked into the relationship between cash holdings and corporate social responsibility as well as the moderating impact of gender diversity on the board. With a final sample of 52 firms and 520 firm-year observations, the study used a dataset of non-financial companies registered on the Egyptian Exchange (EGX) between 2012 and 2021. To assess the research hypotheses, a statistical analysis was conducted utilizing two-step system GMM estimations, pooled OLS, and a fixed effects regression analysis. The findings indicated a strong positive correlation between cash holdings and CSR. Additionally, it was discovered that gender diversity on boards has a negative moderating effect since it reduces the correlation between cash holdings and CSR. The study was unable to demonstrate the direct impact of board diversity on the cash conversion cycle since gender, a representative of board diversity, was examined as a moderating variable.

The impact of the cash conversion cycle (CCC) on the profitability of Indian pharmaceutical companies was investigated by Farhan et al. in 2021. A panel dataset of 82 businesses from 2008 to 2017 served as the basis for the investigation. The generalized method of moment (GMM) model is used in the study to estimate the outcomes. CCC was utilized as an independent variable, and return on assets (ROA), net operating margin (NOM), and Tobin Q (TQ) are used as stand-ins for a company's performance. The study found that the cash conversion cycle was impacted by the composition of the board of directors. The study's focus on Indian pharmaceutical businesses created contextual deficiencies thus showing a contextual gap.

An investigation into the impact that corporate governance practices had on the management of the cash conversion cycle of conglomerates that were listed in Nigeria between the years 2004 and 2013 was carried out by Kantudu et al. (2016). The goal of the study was to investigate the influence that these practices had. The research study included conglomerates that were listed in Nigeria during the years 2004 and 2013. The companies that participated in the study were listed in Nigeria. A total of five businesses were selected from among the six conglomerates that are traded on the Nigerian Stock Exchange. Secondary data obtained from

the Nigerian Stock Exchange's Fact book was utilized in the research, in addition to the Annual Reports and Accounts of the companies chosen for the analysis. However, contrary to other studies findings, the study's conclusions showed that the size and makeup of the board had a significant positive impact on the cash conversion cycle. This was the case regardless of whether the board was composed of individuals or corporations. The study was done in Nigeria thus showing a contextual gap. The current study was done in Kenya.

Similarly, Ajanthan and Kumara (2017) used a quantitative and deductive research methodology in their examination into how corporate governance standards affect the cash holdings of Sri Lankan listed companies. The study, which used multiple regression analysis on data gathered from the corporate annual reports of 90 listed companies, discovered that cash holdings are significantly impacted negatively by corporate governance practices like board size and gender diversity and positively by independent chairs. According to the findings, a reduction in the cash conversion cycles (CCC) of Sri Lankan listed enterprises can be ascribed to the presence of a greater number of members on the board, particularly independent directors, as well as the conduct of more regular meetings throughout the year. This is the case notably in the case of businesses that are listed on the stock exchange. Given that the CCC of these companies has reduced, this is the situation that has arisen. Furthermore, there was a decrease in the overall quantity of events that transpired during the year. To be more precise, the goal of this study is to close the contextual gap that was noted in the Ajanthan et al. (2017) study conducted among Sri Lankan businesses. This research was carried out among businesses in Sri Lanka. In contrast, our research focused on companies in Kenya rather than enterprises in Sri Lanka in order to fill up this knowledge vacuum. This is because Kenya is a more developed country than Sri Lanka. This is going to be done in order to make up for the knowledge gap that has been identified.

Similarly, Al-Matari and associates (2012) sought to determine whether or not the performance of non-financial companies listed in Kuwait is correlated with the composition of the board of directors.. From the beginning of the 2009 fiscal year until the end of the year, information was collected from 136 different companies using a sample that was representative of the entire population. This action was taken with the intention of effectively attaining the objectives of the study, which was the driving force behind undertaking this particular course of action. In order to assess whether or not a number of different factors had the potential to serve as prospective indications of the operation's performance, the return on assets (ROA) measure was utilized to study a number of various variables. To accomplish the goal of establishing

whether or not the ROA metric may be applied, this was carried out in order to fulfill the required purpose. The dual role of the chief executive officer, the length of time that the chief executive officer served, the size of the audit committee, the size of the board, and the balance of the board were some of the elements that were taken into consideration prior to making the decision. When Al-Matari et al. (2012) attempted to build a connection between board attributes and CCC, they were unsuccessful. As a consequence, a conceptual gap was created as a result of this failure. In addition to this, they were unable to differentiate between the two instances. The purpose of this research was to determine whether or not it is possible to develop a connection between the characteristics of boards and the cash conversion cycle (CCC) in order to bring about a reduction in the gap between the two.

2.3.1.3 Board Size and Cash Conversion Cycle

A study by Attari and Raza (2012) examined the relationship between the cash conversion cycle and the size and profitability of companies in the four distinct industrial sectors listed on the Karachi Stock Exchange: food producers, cement, automobile and parts manufacturers, and chemical producers. The information was gathered from the annual reports of 31 selected companies, or 143 companies in the associated industries, for the years 2006–2010. Pearson correlation analysis and One-Way ANOVA were used to analyze the data. A substantial inverse relationship between the CCC and the firm size in terms of total assets was discovered. Only manufacturing enterprises were the focus of the study, even though it was carried out among listed firms, just like the current study.

Similarly, Abbas et al. (2019) examined the connections between working capital management, corporate governance, and business performance. The sample for this study consisted of 140 non-financial companies' financial data from 2008 to 2015 that were listed on the Pakistan Stock Exchange. To estimate the formulated relationships, the Pooled Ordinary Least Square estimation method was employed. Board size has a beneficial effect on the cash conversion cycle, according to this study. Pooled regression analysis was employed in this study, but ordinary least square regression analysis was used in the current investigation. As a result, the methodology used in these two studies was different thus showing a methodological gap.

The relationship between the effectiveness of working capital management and the traits of the board of directors was investigated by Mostafa Hamdy Rady in 2023. Among the independent factors included in these board features were the CEO duality, board size, composition, audit committee, audit committee meetings, and board meetings. The cash conversion cycle (CCC)

and cash holdings, which assess working capital management efficiency with an emphasis on comparative outcomes, are the dependent variables. The study was carried out on a sample of stock exchange-listed Egyptian companies. Panel data from 41 manufacturing enterprises listed during a 5-year period were gathered for the study, yielding 202 observations in total. Based on the company's working capital management policy, the study found a relationship between board features and working capital management efficiency. The study was carried out in Egypt and concentrated on the features of boards of listed companies thus showing a contextual gap.

According to preliminary research conducted by Moustafasoliman et al. (2018) there is a significant relationship between an organization's financial success and the leadership of its chief executive officer (CEO). It was concluded that this relationship had a significant relevance. It is also important to note that the size of the board of directors and the company's overall financial success were significantly correlated. Empirical evidence has been utilized to demonstrate a statistically significant association between the frequency of meetings held by the Board of Directors and the financial performance of the organization. This correlation has been established beyond a reasonable doubt. Over a considerable amount of time, this correlation has been in existence. After further examination, it was shown that there is no correlation between the persons that serve on the Independence board and the level of financial success that the company enjoys.

In another study, Waithaka et al. (2013) discovered that there is a substantial inverse correlation between social performance and board size, director salary, and director independence. This indicates that there is a significant relationship between these three factors. As opposed to the explanatory research approach used in the study conducted by Waithaka et al. (2013), a correlational research methodology was employed for this analysis. This investigation explored the relationship between the variables of interest. For the purpose of this investigation, the method of research known as explanatory research was applied. The objective of this piece is to examine the similarities and differences between the two distinct approaches that have been adopted. The utilization of correlational research designs is carried out with the purpose of addressing the methodological gap that has been found. This is done within the context of addressing the gap that has been recognized.

Within the scope of the investigation that Kajola et al. (2017) carried out, a total of thirty-five non-financial businesses that were listed on the Nigerian Stock Exchange were investigated. It was the goal of this inquiry to determine whether or not there is a connection between the size of the board of directors and the level of financial success that the firm achieves or does not

reach. For the purpose of this analysis, the years 2003 through 2014 are taken into consideration between the years 2003 and 2014. This connection is strong and positive. It is a good thing that this connection exists. Different estimate methods, such as panel data regression analysis and fixed effects model, were utilized in order to accomplish the goal of understanding the nature of this connection. The study focus was firms listed on the Nigerian Stock Exchange (NSE) thus showing a contextual gap.

Similarly, Isik et al. (2016) investigated the influence that the size and composition of the board of directors had on the performance of thirty Turkish commercial banks between the years 2008 and 2012. Specifically with regard to the Operating Return on Asset (OROA) and Return on Asset (ROA), the findings of the panel fixed effects regression reveal that the size of the board of directors has a considerable and beneficial influence on the performance of the bank. This is the case in particular. The CCC served as the dependent variable in this study, in contrast to the study that was carried out by Isik et al. (2016), which utilized performance as the dependent variable and culminated in a conceptual breach. In this investigation, the CCC served as the dependent variable. In contrast to the study that was conducted by both of these researchers, this is the opposite of what they found. Therefore the studies presented empirical gaps.

The impact of board membership and size on the financial performance of South African companies listed on the Johannesburg Stock Exchange is examined by Munyradadzi et al. (2016). They accomplish this by applying resource dependence theory and agency theory in an effort to ascertain the influence that these variables have. To be more specific, they concentrate on gaining an understanding of how the aforementioned elements affect the capacity of the companies to make revenues. In particular, the statistics suggest that there is no significant association between the size of the board of directors and either Tobin's Q or ROE, which are two measures that quantify performance. Both of these measures are used to evaluate the effectiveness of an organization. These two measures are utilized in the process of assessing the performance of the corporation. However, it has been discovered that there is a positive link between the size of the board of directors and another measure of success known as Return on Assets (ROA). This correlation was found to exist between the two variables. In contrast to what was traditionally believed, this is not the case. In contrast to the research that was conducted by Munyradadzi et al. (2016), which employed performance as the dependent variable and resulted in a conceptual gap, the research that was carried out here used CCC as the dependent variable. This was done in order to differentiate the findings from those of the previous study.

Similarly, Rana et al. (2017) focused on agricultural companies that had been listed on the NSE between the years of 2008 and 2015. The study looked at how the profitability of agricultural listed firms on the Nairobi Securities Exchange was affected by the gender diversity of their boards between 2008 and 2015. Both the Fixed Effect and Random Effect models were used to evaluate panel data. According to Tobin's Q, board size has a negative and statistically significant effect, but ROA, the profitability metric, has a positive and negligible effect. However, it is noteworthy to highlight that this association's statistical significance is not very strong. Nevertheless, the results do not indicate a substantial association between the variables when Tobin's Q is used as the profitability measure. When the outcomes are taken into account, this is the case. This may or may not be the situation at any given time. The results of the investigation conducted by Rana et al. (2017) yielded conclusions that were diametrically opposed to those of the previous research. This was the case because the findings generated contradictory findings. The goal of this study is to undertake an analysis of the impacts that gender diversity has on boards of directors in order to address the lack of empirical evidence that was revealed in the research carried out by Rana et al. (2017). This research was carried out in order to address the paucity of empirical data. The research was carried out with the purpose of addressing the deficiency in empirical evidence that was brought up previously in the discussion.

2.3.2 Firm Characteristics and Cash Conversion Cycle

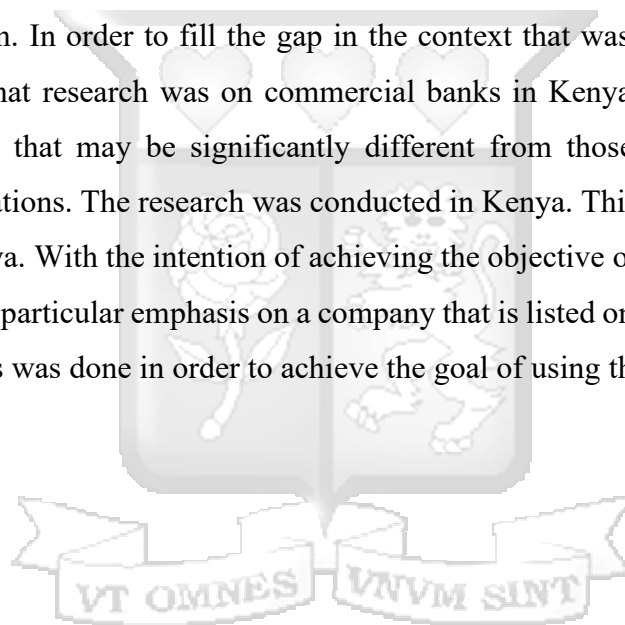
2.3.2.1 Firm Size and Cash Conversion Cycle

In order to determine the extent to which the size of a company has an impact on the financial success of pension plans in Kenya, Njoroge (2014) carried out research with the intention of determining the extent to which this impact plays a role. This research was carried out with the intention of assessing the degree to which this impact is present in the world. Additionally, he researched the nature of the link that exists between market share, the number of employees, book assets, the number of branches, and retained earnings. This was done in addition to the previous investigation. In his investigation, he discovered that there is a substantial connection between these elements. While carrying out the assessment, a descriptive research design was chosen as the method of data collection. This decision was made as part of the process of carrying out the evaluation. Following the completion of the research project, it was found that the market exhibited a considerable amount of inconsistency and volatility. Clear evidence of this event were the fluctuation of the Treasury bill rate, the value of the NSE index, and other offshore indices. All of these trends occurred simultaneously. Based on the findings of the investigation, it was determined that the market exhibited a significant amount of volatility. This research endeavor is aimed at utilizing the size of the company as a significant characteristic of the company in order to accomplish its purpose. In line with the purpose that was discussed earlier, this is the case. In contrast to the work that Njoroge (2014) conducted, which concentrated on financial performance as the dependent variable and thereby established a conceptual gap, the objective of this study is to bridge this gap by focussing on CCC as the dependent variable. This is in contrast to the work that Njoroge (2014) did. When compared to the work that Njoroge (2014) undertook, this stands in stark contrast. This stands in stark contrast to the work that Njoroge (2014) did, which was carried out in the same year.

Similarly, Naran (2013) did research that included an analysis of the impact that the size of the company and the voluntary sharing of information had on the financial performance of commercial banks that served Kenya. This research was carried out in order to study the relationship between these two factors. During the course of the research that they conducted, this analysis was carried out at several points. During the course of the test, a method of research known as descriptive research was utilized at a number of different periods in time. The findings of the inquiry into the connection between these three factors reveal that there is a substantial connection between voluntary disclosure, the size of the organization, and financial performance. The study findings agreed with Muhindi and Ngaba (2018) who found that firm size had a significant effect on financial performance on banks. The studies focused on financial performance of firms as the dependent variable thus showing a contextual gap.

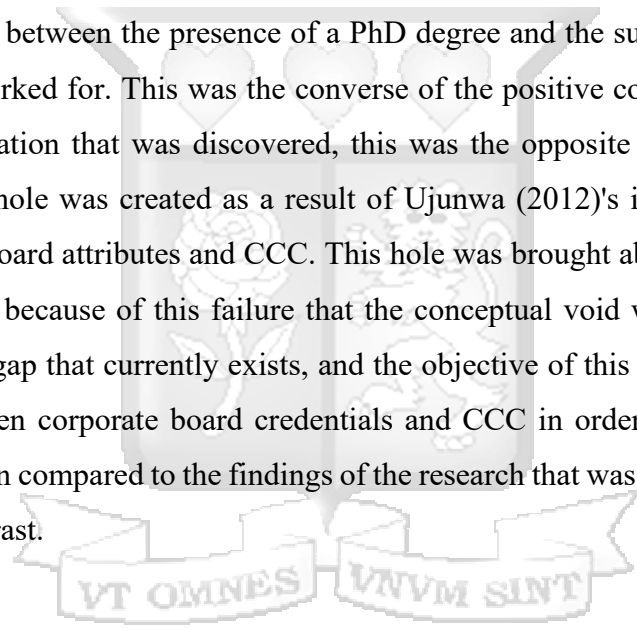
In another study that was carried out by Ukaegbu (2014), a cross-country methodology was applied, and the list of participants included countries that are situated in sub-Saharan Africa. Ukaegbu (2014) was the one for whom the study was carried out. The survey discovered that Kenyan enterprises were more profitable than those in other nations that had the same level of industrialization as Kenya. This was the case despite the fact that other countries had higher levels of industrialization than Kenya did. In spite of the fact that Kenya had a lower rank of industrialization, this was the condition that existed at the time. These characteristics include the size of the firm and the size of the board of directors. This was shown to be the case after investigation. This investigation is being conducted with the intention of filling the conceptual hole that was left behind, as indicated by the outcomes of the research that was carried out by Ukaegbu (2014). It was not found in that study that there is a connection between the size of a firm and CCC; hence, the objective of this research is to fill the vacuum that was left by the previous study. The current research strived to investigate the connection between CCC and firm characteristics, such as the size of the company, in order to fill the information gap that has been brought to light. This gap in knowledge has been highlighted.

Similarly, Muhindi et al. (2018) conducted was to evaluate the extent to which the size of a company has an impact on the amount of profit that is made by commercial banks in Kenya in relation to their operations. Specifically, the researchers wanted to get an understanding of the extent to which this impact exists. For the purpose of carrying out the study, secondary data were gathered from the 42 commercial banks that were operational in Kenya between the years of 2012 and 2016. In the course of the research, this information was utilized. After finishing the regression study, the researchers came to the realization that the size of the company is responsible for 58.5% of the difference in returns for commercial banks in Kenya. This was the result that they reached. After finishing their investigation, the researchers arrived at this conclusion using their findings. In order to address the gap in knowledge that was brought about by the research that Muhindi and Ngaba (2018) conducted, the purpose of this study is to redress the situation. In order to fill the gap in the context that was created, this action is taken. The focus of that research was on commercial banks in Kenya, which are subject to regulatory constraints that may be significantly different from those that are imposed on publicly listed corporations. The research was conducted in Kenya. This study was carried out in the country of Kenya. With the intention of achieving the objective of bridging this gap, the current study placed a particular emphasis on a company that is listed on the Nairobi Securities Exchange (NSE). This was done in order to achieve the goal of using this study to accomplish the investigation.



Within the framework of the connection between the success of the corporation and its expansion, Abbasi et al. (2015) brought to light the influence that the size of the firm has on the interaction between the two. The performance of this activity was carried out within the context of the interaction that took place between the two. An alternative hypothesis and a null hypothesis were developed in order to achieve the goals of the investigation. The null hypothesis was the beginning of the investigation. Secondary cross-sectional data were obtained from each of the fifty companies that are listed on the Karachi Stock Exchange. These companies were the sources of the data. Within these companies, there was an investigation that took place. The stationary data were checked to ensure that they were formal before the regression equation was applied. This was done before the equation was also applied. In addition, the issue of multicollinearity was addressed to a degree that was acceptable prior to the utilization of the equation. The results of the regression analysis gave evidence to support the theory, which asserted that the alternative research hypothesis, which indicated that the size of a corporation had a substantial influence on both its growth and its performance, was accurate. The theory was supported by the data that was produced by the regression study. The study findings agreed with Muhindi and Ngaba (2018) who found that firm size had a significant effect on financial performance on banks. The research that was carried out by Abbasi and colleagues (2015) focused primarily on the performance and growth of businesses as its primary purpose. This was the primary objective of the research. The gap in conceptual understanding that was found throughout the course of that research study is going to be filled by this investigation, which is the reason for its existence. This is something that needs to be done in order to fulfil the void that was identified. The goal of the current study is to establish a link between the two components by establishing a connection between the size of a company and CCC. This connection was established through the establishment of a connection. Creating this connection was accomplished by the application of a particular procedure.

Similarly, Ujunwa (2012) explored the influence that the qualities of corporate boards have on the financial success of publicly traded enterprises that were founded in Nigeria. The study focused companies that were created in Nigeria. There was a positive correlation between the company and factors such as the ethnicity of the board, the percentage of board members who held postgraduate degrees, and the nation of the board. These factors were all related to the firm. Regardless of whether the board members were male or female, this was the result of their membership in the organization. The robustness test, which was conducted on 160 small businesses, all of which had boards of directors that were identical to one another, proved that there is a positive correlation between board dualism and the success of the organization. The test was carried out on all of these businesses. When the findings of the evaluation were reviewed, it was clear that both of these conclusions were correct. On the other hand, there was a negative correlation between the presence of a PhD degree and the success of the company that the individual worked for. This was the converse of the positive correlation. As opposed to the positive association that was discovered, this was the opposite of it. Because of this failure, a conceptual hole was created as a result of Ujunwa (2012)'s inability to establish a connection between board attributes and CCC. This hole was brought about as a consequence of this failure. It was because of this failure that the conceptual void was able to come into existence. There is a gap that currently exists, and the objective of this study is to investigate the connection between corporate board credentials and CCC in order to make an effort to address that gap. When compared to the findings of the research that was conducted by Ujunwa (2012), this is in contrast.



The procedure of conducting a study was something that Jafari and his colleagues (2014) went through in order to examine the connection that exists between debt, the size of a business, and liquidity. In order to carry out the assessment, a statistical analysis was the method that was applied. In order to accomplish the purpose of this study, an investigation was conducted on one hundred different companies that are traded on the Tehran Stock Exchange. According to the results of their analysis, there is a correlation that is both direct and inverse between the amount of debt that a firm carries and the degree to which it is sensitive to cash flow. This correlation is revealed by the findings of their investigation. Additionally, there is a correlation that may be considered statistically significant between the size of a company and the extent to which its cash flow is positively sensitive to investment. This correlation is found to exist between the two variables. There is a correlation between the two variables that the company displays, and this correlation exists. Each of these discoveries are reinforced by the findings of their research, which provide evidence that each of these discoveries are equally essential. These discoveries led to the production of a significant number of diverse results, which were all different from one another. In addition, it is of the utmost importance to acknowledge that these studies were carried out in a variety of different industries. This suggests that the variations in their findings might be attributed to the characteristics that are present in the businesses that are being investigated. In order to discover a solution to the contextual imbalance that has been detected, the objective of this inquiry is to conduct a precisely targeted analysis of the companies that are listed on the National Stock Exchange (NSE). This is the conclusion that has been arrived at, which stands in contradiction to the conclusions of the past investigations that have been carried out.

In 2015, Takon and his colleagues conducted a study in which they explored the ways in which the management of working capital affects the profitability of companies that are listed in Nigeria. Specifically, they focused on how these companies manage their working capital. The specific emphasis of their attention was on the ways in which these factors interact with one another. Ex post facto research design was selected as the appropriate research methodology for the aim of this study since it was the most straightforward approach. It was due to the fact that the types of data that were being analyzed were historical in nature that this particular occurrence took place. The annual reports and financial statements that were utilized in the process of gathering the relevant information were provided by a representative sample of forty-six firms that were listed on the Nigeria Stock Exchange between the years 2000 and 2009. These companies were involved in the process of gathering the information. The selection of these businesses was based on the fact that they were representative of the group. The research project made use of a number of different research methodologies throughout the course of its examination. These methodologies included panel data analysis, pooled ordinary least squares (OLS) regression, and fixed effects research. Additionally, the research endeavor utilized a variety of different research methodologies in order to accomplish its goals. The findings of this study revealed that there is a direct correlation between age and profitability, with older businesses exhibiting higher levels of profitability compared to younger businesses. In this experiment, this idea was put to the test. Based on the information that was gathered, this is the conclusion that was taken into consideration. Additionally, there was a substantial inverse link between accounts receivable and return on assets, which indicated that when firms decreased their accounts receivable, they experienced an increase in their profitability. This was the case because of the fact that the relationship was considerable. The conclusion that was reached as a result of the research was as follows. In light of the fact that the connection turned out to be unfavorable, this occurred as a consequence. The studies were done in Nigeria thus showing a contextual gap.

2.3.2.3 Firm Age and Cash Conversion Cycle

Samosir (2018) seeks to provide empirical data regarding the effects of firm age, business size, and cash conversion cycle on profitability. This is what the study aims to accomplish. This is the reason the study was done in the first place. A quantitative technique is used to accomplish the objectives of this study, and the purposive sampling method is employed to carry out the data gathering processes. The goals of this study are pursued through the application of both of these strategies. Cash conversion cycle was used as an independent variable in the study thus showing a contextual gap.

For the purpose of this study, the population consisted of manufacturing companies that were listed on the Indonesia Stock Exchange (BEI) between the years of 2012 and 2014. It was necessary to take these steps in order to guarantee that the goals of this investigation were accomplished. There were a total of three hundred and three observations that were recorded based on the sample size, which consisted of one hundred and one different companies. Panel data regression was the methodology that was applied in order to conduct out the analysis. You can get more information about this methodology here. The data led to the conclusion that the cash conversion cycle, the size of the company, and the age of the organization all had a positive influence on the return on assets variable. This conclusion was reached from the findings of the study. It was demonstrated that this was the case by the fact that all three of these positive factors were present. The conclusion that was reached was that this was the case. The study was done in Indonesia thus showing a contextual gap.

According to the results of the research that Takon and Atseye (2015) conducted, there is a correlation between the age of a company and its profitability. This association is an indication of a good relationship. A further finding made by the researchers is that this correlation is positive. A similar finding was made by Samosir (2018), who found that there is a positive correlation between the cash conversion cycle and the age of the company. There is a correlation between this discovery and the findings of the earlier investigation. This connection was shown to be a strong one through the demonstration. To what extent does the age of the firm have an effect on the cash conversion cycle (CCC) of the company? That is the question that was investigated in this study. On the other hand, this conclusion suggests that there is a connection between the two, in contrast to the findings of the two studies, which showed that there was no association between the age of the company and the CCC. The studies therefore showed contextual gap.

2.3.3 Moderating Effect of Inflation Rate

Obtaining an understanding of the link that exists between the management of a company's working capital and the profitability of the firm was the objective of the research that was carried out by Simon et al. (2019). Inflation rates served as a moderating factor in the relationship between the two factors. To accomplish this goal, the investigation was carried out in order to meet the requirements. On the basis of the findings, it has been found that effective management of working capital (WCM) helps businesses improve their performance by ensuring that they have sufficient liquidity in the form of cash flow. This is accomplished by ensuring that they have appropriate liquidity. It should come as no surprise that this is something that is clearly apparent, particularly in circumstances in which the macroeconomic climate is considered normative. There is a relationship between working capital management (WCM) and the profitability of a company, notably in terms of Return on Assets (ROA) and Return on Equity (ROE). The rate of inflation is another component that is brought into the equation when it comes to the relationship between WCM and profitability. This is due to the fact that carbon dioxide (CO₂) is a major contributor to the pace of inflation. The outcomes of this study suggest that the impact of WCM on the performance of businesses is contingent on the rates of inflation. This is the conclusion that can be drawn from the investigations that were conducted. The findings allow for this to be the conclusion that can be formed from them. Recent research carried out by Simon et al. (2019) has demonstrated that the rate of inflation has an effect on the effective management of working capital as well as the overall performance of firms. Simon et al. (2019) observed a gap in conceptual knowledge, and our inquiry is aimed at filling that gap. Our investigation's focus is the gap in conceptual comprehension. In addition to taking into account the moderating effect of inflation rates, the objective of this study is to assess the impact that the features of businesses and boards of directors have on the cash conversion cycle (CCC). This action is taken with the purpose of addressing a knowledge gap that has been recognized during the process.

Similarly, Mathuva (2014) carried out a study with the intention of determining whether or not non-financial enterprises that are listed on the Nairobi Securities Exchange (NSE) exhibit a certain cash conversion cycle (CCC) that is directed toward completing a particular target. Additionally, there is a significant inverse link between the cash conversion cycle (CCC) and a number of other factors, such as a greater return on assets, investments in capital expenditures, and the likelihood of growth. This correlation is a significant negative correlation. The fact that this link is negative rather than positive is the reason why it is significant. The significance of

this relationship lies in the fact that it occurs in the opposite direction. There is a significant positive connection between inflation and the Community Credit, according to the findings of the statistical study that was conducted. The results of the study indicate that this correlation is significantly significant. The study findings were however not in agreement with Halim, Astuty and Hubeis (2022) who found that inflation had no significant relationship with community credit. According to the findings of this study, the rate of inflation had an effect on other factors. This is in contrast to the findings of the research that was conducted by Mathuva (2014), who found that the CCC and firm-specific components were not affected by the rate of inflation. Based on the findings of this study, it was proved that the rate of inflation had an effect on other factors. By using the rate of inflation as a means of bridging the gap that exists between the two variables, the objective of this inquiry is to lessen the degree of correlation that exists between the two variables. This was accomplished by investigating the relationship between the two variables. It is possible that the course of the study made it possible to accomplish this assignment successfully.

2.4 Summary of Literature Review and Research Gaps

In contrast to this study, which linked the two with CCC in order to bridge the conceptual gap, other studies have tied company characteristics to other dependent variables such as financial performance. This study did not do so. Additionally, other research utilized the rate of inflation as a dependent variable, which resulted in the creation of a conceptual void. On the other hand, the rate of inflation was utilized in this study not only as a moderating variable but also as a dependent variable. Additionally, there are a significant number of studies that have utilized a diversity of methodologies, which has finally led to the existence of methodological gaps. The results obtained by other people were in conflict with one another, which resulted in gaps in the empirical data.

Table 2.1: Summary of Literature Review and Research Gaps

Study	Findings	Research gap and how the study bridged the gap
Gill, Biger, and Obradovich (2015)	There is a significant reduction in the length of both the inventory holding time and the cash conversion cycle	For the aim of this investigation, manufacturing companies were selected instead of listed corporations, which may have major differences

	when there are independent directors currently serving on the board of directors.	between the two types of businesses. As a consequence of this, there is a conceptual gap. In order to address the gap, the research focused on all of the companies that are listed on the National Stock Exchange (NSE).
Moustafasoliman, and Youssef (2018)	There exists a significant relationship between the size of the organization's board of directors and its financial performance.	Due to the fact that the study focused on the financial performance of Egyptian enterprises thus showing a conceptual gap. In this particular study, the primary focus was on businesses that are based in Kenya.
Tonui and Olweny (2018)	There was a strong and positive connection between the qualifications of the board of directors and the financial success of these state-owned firms, as indicated by the findings of both correlation and regression studies. Each of these studies found that the association was significant.	The previous study was largely concerned with state collaboration; however, the current study focused on listed businesses in order to bridge the contextual gap that exists between the two.
Waithaka, Gakure, and Wanjau (2013)	Microfinance institutions (MFIs) in Kenya have the ability to improve their social performance by increasing the number of board members they have in accordance with the recommendations made by the Capital Markets Authority.	For the purpose of this investigation, an explanatory research design was applied thus showing a methodological gap. However, in order to bridge the gap within the methodology, a correlational research design was utilized for this study.
Gill, Biger, and Obradovich (2015)	The results show that the length of the cash conversion cycle and the inventory holding period are shortened when manufacturing companies have independent directors on their boards. This is important because it makes it possible to use resources more effectively.	The primary focus of the research was on doing an investigation into the cash conversion cycle of firms that are involved in manufacturing in the United States. For the purpose of bridging the gap, the local companies that are listed on the NSE served as the primary focus of this study.
Kantudu, Bahamman and Mohammad (2016)	It was discovered that the board's composition and size had a significant effect on the cash conversion cycle.	The study did not include any moderating variable thus showing a contextual gap. The current study will

		include inflation rate as the moderating variable.
Ajanthan and Kumara (2017)	Because of the huge number of directors and independent directors that are present on the boards of directors of Sri Lankan listed firms, the CCCs of these companies are shorter than those of other corporations.	The findings, which did not identify the intensity, direction, or importance of the link, resulted in the creation of a gap in the empirical evidence. This gap was introduced as a result of the findings thus showing an empirical gap. The objective of this study was to ascertain the specific impact that the CCC has had in order to bring about a reduction in the gap.
Kamau and Basweti (2013)	With regard to the relationship between productive management of working capital and excellent corporate governance, there is no correlation that can be regarded as statistically significant.	In order to fill in the gaps in the contextual information, the research was carried out in Sri Lankan businesses. The aim of this study was to strengthen the link between Kenyan companies and the study.
Rana and Wairimu (2013)	The profitability indicator that was evaluated resulted in outcomes that were contradictory and inconsistent with one another. The results are favorable and statistically insignificant when ROA is employed as the metric of profitability. Furthermore, the results are optimistic. On the other hand, when Tobin's Q is utilized as the indicator of profitability, the outcomes tend to be favorable.	A gap in the empirical research was established as a result of the study's discovery of a correlation that was not significant. This finding stands in contrast to the conclusions of previous studies, which generated the gap. The goal of this research is to provide a solution to this problem.
Al-Matari, Al-Swidi, Bt-Fadzil, and Al-Matari (2012)	When using debt and firm size as control factors in the analysis of the link between the two variables, the presence of a dual CEO and the size of the audit committee both positively impact return on assets (ROA).	The findings of the study, which were found to be in conflict with one another, led to the creation of an empirical gap, which the current investigation attempted to fill.

Kajola, Onalapo, and Adelowotan's (2017)	The two financial performance indicators are significantly and favorably correlated with the size of the board of directors, as determined by taking the natural logarithm of the total number of directors on the board. The fact that this link is positive makes it noteworthy.	The study did not include any moderating variable thus showing a contextual gap. The current study will include inflation rate as the moderating variable.
Isik and Ince (2016)	The size of the board of directors has a considerable and beneficial impact on the profitability of the bank, even after taking into consideration other factors such as the size of the bank, the credit risk, the liquidity risk, the net interest margin, and the revenue that is not related to interest.	Al-Matari and others (2012) created a conceptual gap by failing to make a connection between board attributes and CCC. There was no connection established between the two. The objective of this research was to make an effort to determine whether or not there is a connection between the quality of boards and CCC measures.
Munyradadzi and Nirupa (2016)	A positive correlation has been observed between the board's size and another performance factor.	Due to the fact that the study focused on businesses that were listed on the Nigerian Stock Exchange, there was a gap in the background information. The focus of this study was on companies that are listed on the National Stock Exchange (NSE) in order to fill the void.
Mahfoudh (2013)	The research came to the conclusion that there was a connection between the financial success of the company and both the liquidity of the company and the size of the board of directors.	A conceptual breakdown occurred as a consequence of the fact that performance was used as the dependent variable in the study thus showing a conceptual gap. Throughout the course of this inquiry, CCC functioned as the dependent variable.
Ujunwa (2012)	The presence of a doctoral degree, on the other hand, was found to have a negative link with business performance, whilst the presence of board dualism was found to have a positive correlation with organisational performance.	A conceptual breakdown occurred as a consequence of the fact that performance was used as the dependent variable in the study thus showing a conceptual gap. Throughout the course of this inquiry, CCC functioned as the dependent variable.

Dioha, Mohammed, and Okpanachi (2018)	It has also been demonstrated that the size of the firm and the rate of growth in sales have a major impact on the amount of profits that are made by the companies.	When it came to the study, the connection between the size of a company and its performance resulted in the creation of a conceptual gap. The size of the company was the dependent variable in this investigation, and the CCC was the independent variable.
Matar and Eneizan (2018)	Financial leverage and the size of the company both have a negative impact on the quantity of profits that the company makes. Together, these two factors have a negative impact.	The failure to establish a connection between board traits and CCC results in a conceptual gap that must be fulfilled. In an effort to close the gap, this study made an effort to create a correlation between the characteristics of boards and CCC qualities.
Simon, Sawandi and Abdul-Hamid (2019)	There is a connection between WCM and the performance of a company in terms of Return on Assets and Return on Equity, however it is a moderate one. There is a moderating effect of the inflation rate on this relationship.	The study did not include any moderating variable thus showing a contextual gap. The current study included inflation rate as the moderating variable.
Mathuva (2014)	In addition, the findings suggest that there is a correlation that is statistically significant and positive between inflation and the CCC.	The study focused on publicly traded consumer product companies in Nigeria, which led to a lack of contextual information as a result of the study's focus. This study focused on companies that are listed in Kenya, which allowed for the gap to be filled throughout the course of the investigation.

Source: Researcher (2025)

2.5 Conceptual Framework

Independent variables

Dependent Variable

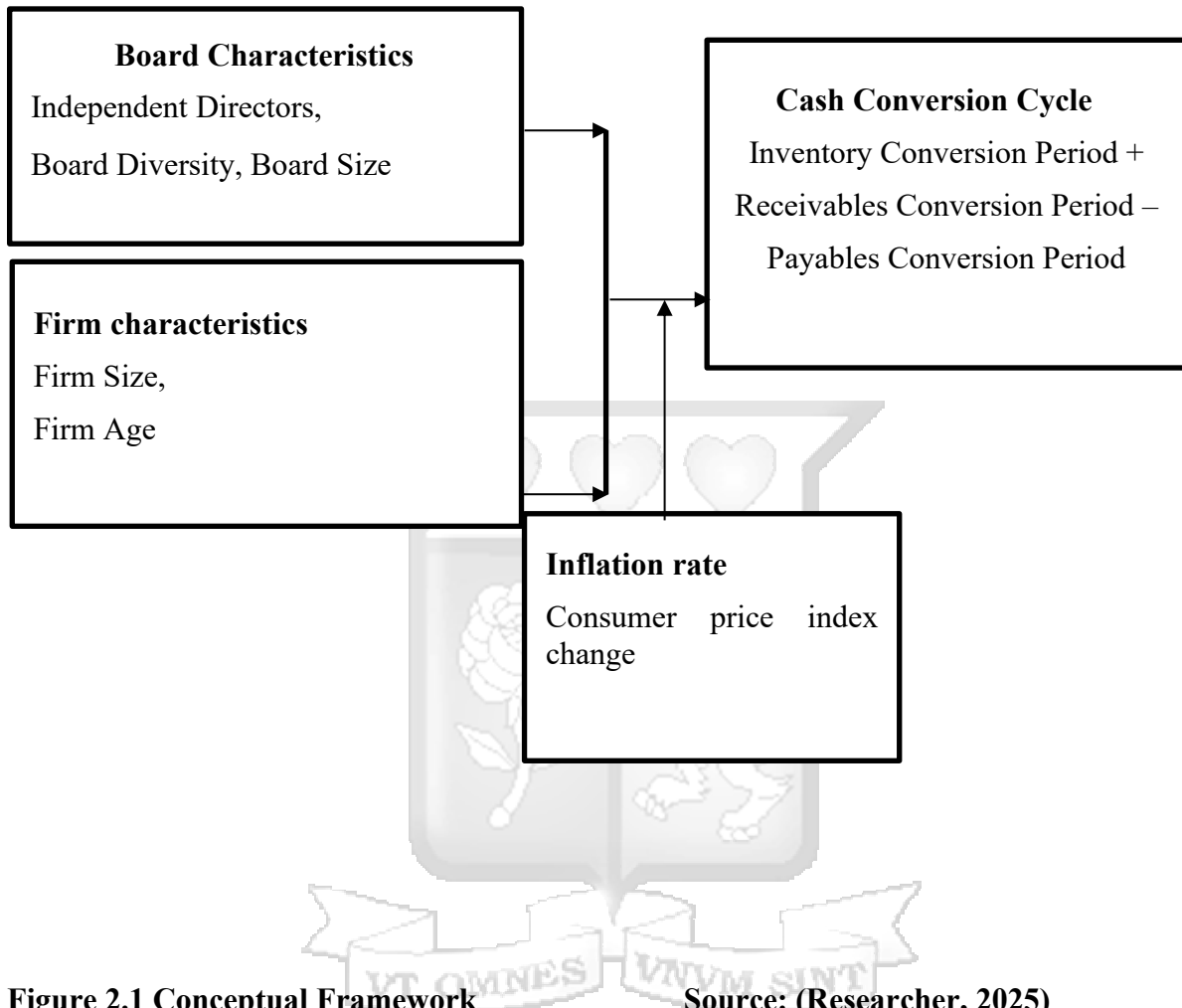


Figure 2.1 Conceptual Framework Source: (Researcher, 2025)

2.6 Chapter Summary

The chapter has outlined the theories that inform the study. These theories include liquidity preference theory and resource dependency theory. The chapter has also outlined the empirical literature. Even though there are a significant number of studies that are associated with the topic, the literature that is currently available is inconclusive regarding the relationship between board and firm characteristics and the cash conversion cycle of listed firms in Kenya, which is moderated by the cost of living. This is the case despite the fact that there are a substantial number of studies that are associated with the subject matter. Although this study is connected

to other studies, some of those studies focused on certain types of businesses that operate inside specific industries. The focus of this study, on the other hand, was on all of the companies that are listed on the NSE, which led to gaps in the contextual information.

Table 2.2: Operationalization of Study Variables

Variable	Variable Definition	Variable Measurement	Scale of Measurement		Supporting Literature	Theories
Board Characteristics	Independent	Independent Director Board Diversity Board Size	Ratio	i) independent directors = no. of independent directors / total no. of directors ii) board diversity = no. of male directors / total no. of directors iii) board size = natural logarithm of total no. of directors for firm characteristics	Moustafasoliman, et al. (2018) Kantudu et al. (2016) Ajanthan et al. (2017) Kamau et al. (2013)	RD-Theory
Firm Characteristics	Independent	Firm Age Firm Size	Ratio	i) firm age = logarithm of no. of firm age (in years) ii) firm size = logarithm of total assets value	Njoroge (2014), Naran (2013), Abbasi et al. (2015), Mathuva (2010), Banos-Caballero (2010), Bestivano (2013)	RD-Theory
CCC	Dependent	ICP + RCP - PCP	Ratio		Mathuva (2014)	LP Theory
Inflation	Moderating	$(CPI_1 - CPI_0) / CPI_0$	Ratio		Simon, et, al. (2019) and Mathuva (2014)	RD-Theory

Source: Researcher (2025)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In order to overcome the obstacles that are associated with research, a research technique is a rigorous plan that is utilized. This approach is regarded as a "research technique" in the literature. The purpose of this chapter was to provide a comprehensive description of the research methodology as well as the process of acquiring the necessary material for this study. In addition to that, the chapter talked about the procedure of getting the content. There are many different aspects of the research that are discussed in this section. Some of these aspects include the research design, the empirical model, the operationalization and measurement of variables, the target population, the sample design, the instrument and method for data collection, the data processing and presentation, diagnostic tests, and ethical concerns. In particular, this section was concerned with the arrangement of the research.

3.2 Research Philosophy

As a result of the conceptual framework that research philosophy provides, researchers have access to a diverse selection of research procedures. This allows researchers to avoid adopting methods that are not suitable and works that are not relevant to the subject matter that they are examining. This is because of the fact that they are able to avoid adopting these methods and works. According to Bajpai (2011), who offered the definition of research philosophy, research philosophy is concerned with the origins of knowledge, the primary nature of knowledge, and the progression of knowledge. Easterby et al. (2012) identified three reasons why researchers should incorporate philosophical analysis into their work: first, it enables the adoption of a comprehensive approach; second, it prevents the inclusion of superfluous tasks when examining research methods; and third, it determines the researcher's true capabilities. All of these reasons are important for researchers to consider. Each and every one of these factors should be taken into consideration by researchers. Following this, each of these points were examined in further depth in the paragraphs that are in the following. According to Saunders et al. (2012), the current investigation made use of the positivist philosophy, which promotes the utilization of large sample sizes and the operationalization of ideas in order to permit the

measurement of those ideas. In addition, the positivist philosophy advocates the utilization of this philosophy. Furthermore, the positivist philosophy utilized in this endeavor. According to Wooldridge (2012), positivism is a philosophical framework that is founded on empirical evidence that is gained and assessed through the use of both quantitative and qualitative approaches. This data is gathered and measured in order to come to a conclusion. The philosophical framework known as positivism is one that is founded on direct experience and observation.

3.3 Research Design

Research designs can be broadly classified into three categories: exploratory, causal, and descriptive. Finding concepts and insights is the aim of exploratory research. While descriptive research typically focuses on characterizing a population in relation to significant characteristics, causal research establishes cause-and-effect links between variables. Descriptive designs aim to describe phenomena or features related to a population of interest, estimate the percentage of the population that possesses these qualities, and identify correlations between various variables (Cooper & Schindler, 2013).

The study's focus was on description. Three primary techniques are used in descriptive designs: survey studies, which characterize the current situation; correlation studies, which look at the relationship between variables; and developmental studies, which look for changes over time (Akhtar, 2016). The research strategy utilized for this particular investigation is going to be a correlational research approach. The correlational research design is a method of conducting research that analyzes the relationships between variables without the researcher having any control or influence over any of the variables. This type of research design was also known as a correlational research design. In addition to being recognized as the inductive research design, this particular form of research design.

3.4 Target Population

Cooper et al. (2014) came up with the phrase "target population" to describe a group of people or things that have similar characteristics and are intended to be researched by a researcher in order to draw statistical inferences or conclusions. This term was coined to characterize the characteristics of the target population. Participants in the study were chosen from among the 63 companies that are offered for trading on the Nairobi Stock Exchange (NSE, 2025).

3.5 Sampling and Sampling Procedure

During the course of the research that Mugenda and Mugenda (2013) conducted, the term "sample frame" was utilized. When referring to the process of selecting a representative sample for the objectives of the research, this phrase is used to specify a comprehensive inventory of all the objects that are employed in the process. Purposive sampling was used to select 45 publicly traded companies that are not in the banking sector were investigated. Purposive sampling allows researchers to select participants based on specific criteria, ensuring the data collected is relevant and rich, leading to more meaningful and focused findings (Thomas, 2022).

3.6 Data Collection

Data collection is the process of carefully obtaining and analysing data in relation to specific variables that are contained within an already existing system. This process is described as "data collection." In this context, the term "data collection" refers to the process of acquiring and analyzing data in this manner. They are able to conduct an analysis of the data and provide responses to inquiries that are pertinent to the circumstance since they are able to use this strategy. The collecting of data is a fundamental component of research in all academic subjects, including the social and physical sciences, the humanities, and business (Vuong, La, Vuong, Ho, Nguyen, Nguyen, et al., 2018). This is the case not only in the social sciences but also in the physical sciences. As a consequence of this, the information gathering method is a crucial component of the research procedure. Despite the fact that the specific methods may differ from one profession to another, the need of ensuring that the data collection process is reliable and honest is consistent across all settings. The reasons for this are that the circumstances in which data collecting takes place are consistent at all times. The basic goal of every endeavor that involves the collection of data is to get information that may be used for data analysis. This is the case regardless of the type of endeavor. The purpose of this approach is to ultimately result in the development of appropriate solutions for the difficulties that are currently being investigated.

3.7 Data Collection Instrument

According to Maxwell (2012) there are two types of data which include primary and secondary data. Secondary data, which refers to information that has been produced from sources of information that are already in existence, was utilized in this inquiry. This is in accordance with

the findings that were presented by Sekaran et al. (2016). The method of data abstraction that is presented in Appendix I was utilized in order to gather the data that was necessary for the project.

3.8 Data Collection Procedure

There are two types of data which include time series and panel data. This study adopted panel data. There are sixty-three listed companies, all of which have produced audited financial statements of their separate companies, and the current research made use of panel data that was acquired from the websites of those companies. Megersa (2014) describes panel data as a type of data that includes measurements that were collected over a period of time and incorporates a number of distinct dimensions. Panel data is a type of data that includes measurements that were obtained over a period of time. In particular, the information that was acquired for the panel was gathered over a period of ten years, specifically from the year 2019 to the year 2023. It was necessary to obtain authorization from the appropriate regulatory agencies before beginning the process of data collection. The National Commission for Science and Technology (NACOSTI) and the graduate school of Strathmore University are two of the regulatory bodies that were required to grant authorization. Prior to the beginning of the process of data collection, this matter was resolved.

3.9 Data Analysis and Presentation

The data was extracted, cleaned, and then imported into STATA version 17 for analysis. Both descriptive and inferential statistics were used in the data analysis process. Descriptive statistics comprised the mean, standard deviation, maximum, and minimum. Descriptive statistics can be used to describe the properties of data and trends in clustering, according to Heeringa et al. (2017). Regression analysis and correlation analysis were two examples of inferential statistics that were utilized to demonstrate the link between variables. The accuracy of the estimate was increased by using the multiple linear regression model to ascertain whether the independent factors predicted the dependent variable.

In accordance with the findings of Gentry, Vaidyanathan, and Lee (1990), the computation of the CCC involves first adding the accounts payable period to the aggregate operating cycle, and then deducting that amount from the overall total. The CCC is often determined in this manner. This is the method that is used. When the conversion period for inventory is added to the conversion period for accounts receivable, the gross operating cycle may be calculated.

This is performed by combining the two conversion periods together. The calculation of the gross operating cycle is performed as a consequence of this. The amount of time that is required to convert raw materials, work that is presently being done, and finished items has been taken into consideration for the purpose of calculating the amount of time that was required for this conversion. The Cash Conversion Cycle is determined by first adding the number of days that inventory is outstanding (DIO) and the number of days that sales are outstanding (DSO). This is the first step in the mathematical calculation. In order to get the Cash Conversion Cycle, it is necessary to complete this preliminary stage. The amount is then lowered by the number of days that payables are past due, which is represented by the abbreviation DPO. This is done after the first period of time. Additionally, the CCC is computed, which is the final step.

3.9.1 Statistical Model

In accordance with Greene (2008), the phrase "empirical modelling" is utilized to refer to any method that is utilized to develop models by means of the utilization of experimentation and observation. In the course of this study, statistical models of correlation and regression were utilized in order to carry out the investigation. For the purpose of gaining a knowledge of the manner in which independent factors influence dependent variables, the fixed model that was presented below was utilized;

Regression before moderation

$$CCC_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 BGD_{it} + \beta_3 BS_{it} + \beta_4 FA_{it} + \beta_5 FS_{it} + \mu_i \dots \dots \dots (i)$$

$$CCC_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 BGD_{it} + \beta_3 BS_{it} + \beta_4 FA_{it} + \beta_5 FS_{it} + \beta_6 M + \beta_7 ID_{it} * M + \beta_8 BGD_{it} * M + \beta_9 BS_{it} * M + \beta_{10} FA_{it} * M + \beta_{11} FS_{it} * M + \mu_i \dots \dots \dots (ii)$$

Where:

CCC_{it} is Cash Conversion Cycle of firm i at time t;

ID_{it} is independent directors of firm i at time t;

BGD_{it} is board gender diversity of firm i at time t;

BS_{it} is board size of firm i at time t;

FS_{it} is firm size of firm i at time t;

FA_{it} is the firm age of firm i at time t;

μ_{it} = between entity error term

i is a firm, i

t is the time period, $t = 2016 \dots 2022$

β_0 is constant term

M = moderating variable of inflation rate

3.10 Test of Significance

Using the definition that was supplied by Myers et al. (2010), a test of significance is a formal approach that is used to compare the evidence that has been seen with a hypothesis. This comparison is done after the hypothesis has been constructed. This comparison shows that the evidence is consistent with the hypothesis, which is a positive sign. According to Dalgaard (2018), the probability of rejecting the null hypothesis when it is truly true is the definition of the given significance level. This definition was used to describe the significance level. Therefore, this is the definition of the significance level that has been mentioned. In the context of this discussion, the level of significance that is being predicted is referred to as the likelihood that is being addressed. An F-test is going to be carried out in order to ascertain the degree to which the independent factors have an impact on the significance of the variable that is being evaluated (or, to be more explicit, the variable that is being utilized in the analysis). In order to evaluate the importance of one of the variables that were studied with the objective of establishing whether or not it is relevant, a confidence level interval of 95% was applied during the course of the inquiry. This was done in order to determine whether or not the variable is relevant. When considered from the point of view of this range, the value of the variable was considered to be significant if it falls within this range.

3.11 Diagnostic Test

By examining the responses that an individual provides to a questionnaire, a diagnostic test is able to discover the individual's personal strengths and weaknesses, as stated by McInnes (2018). This is accomplished through the use of a questionnaire. A determination of the individual's total efficacy is made through the use of this method. This can be accomplished through the application of analytical processes, which is what makes it possible. According to Glasser (2014), the core objective of diagnostic research is to study whether or not a diagnostic test is effective in definitively identifying or removing various features within a specific sample depending on the results of the test. This should be the major focus of research that is diagnostic in nature. Within the realm of diagnostic research, this is the primary goal that is being pursued.

In the course of this research, the results of six distinct examinations were analysed. The Hausman specification test, the normality test, the multicollinearity test, the heteroscedasticity test, the autocorrelation test, and the stationarity test are all examples of these types of tests. Every single one of these assessments were analyzed with regard to the characteristics that are specific to them every single time.

3.11.1 Normality Test

According to McInnes (2018), the purpose of the normality test is to determine whether or not the data sample comes from a population that follows a regular distribution. This is the objective of the test. As a component of the review process, the normality test (Doornik et al., 2008) is applied in order to ascertain whether or not a specific data set is represented by a normal distribution in a manner that is satisfactory. It is expected that the Shapiro-Wilk statistic continued to be the statistical method of choice for the purpose of carrying out the normality test for the study. According to Priyatno (2017), if the significance level is more than 0.05, we are unable to rule out the chance that the data originated from a population that has a distribution that is regularly distributed. This is because we are unable to dismiss the possibility that the data had a regular distribution.

3.11.2 Multicollinearity Test

According to Kothari (2012), the condition that is frequently referred to as multicollinearity is one in which the independent variables have a high degree of correlation with one another. This degree of correlation is a characteristic of the state. Through the utilization of a method that is commonly referred to as the multicollinearity test, researchers are able to ascertain whether or not the connection between two independent variables is statistically significant. In order to accomplish the purpose of this experiment, the correlation matrix and variance inflation factors (VIF) were utilized in the suitable method. Multicollinearity is a phenomenon that occurs when there is a correlation between two independent variables that is greater than 0.70. This correlation is necessary for the phenomenon to take place. The presence of a substantial link between the two independent variables is shown by the Variance Inflation Factor (VIF) having a value that is equal to or greater than 5. This is the evidence that the relationship is significant.

3.11.3 Heteroscedasticity Test

Heteroscedasticity is a serious worry in regression analysis and analysis of variance. This is due to the fact that it undermines statistical tests that assume all modeling mistakes have the

same variance. Specifically, this is due to the fact that it is a factor that influences the outcomes of these examinations. This is the case because heteroscedasticity reveals that all errors have the same variance. This is the reason why this occurrence occurs. In accordance with the findings of Box et al. (2011), heteroscedasticity is a phenomenon that takes place when the variance of a variable does not remain constant during the duration of an observation period. In light of this, it can be deduced that the variance of the variable is not a constant. Taking into account the results of this inquiry, the null hypothesis proposes that the variances of the population are comparable to one another. It is possible that the hypothesis was rejected if the significance level is found to be higher than the p-value that was produced through the application of Levene's test (Vogt et al., 2011).

3.11.4 Autocorrelation Test

The term "autocorrelation" refers to a mathematical representation of the degree to which a particular time series is comparable to a delayed version of itself throughout the course of several time intervals that are followed by one another. Chatterjee et al. (2013) suggested that the Durbin-Watson statistic might be utilized as a tool for the purpose of locating instances of autocorrelation in order to be able to determine whether or not autocorrelation is present. According to the data that were reported by Chatterjee et al. (2013), a number that is closer to 0 implies a stronger positive autocorrelation, whilst a value that is closer to 4 shows a stronger negative autocorrelation that is stronger. This is the conclusion that can be drawn from the findings. In the event that the findings demonstrate evidence of serial correlation in the residuals, the Cochrane-Orcutt approach was utilized in order to implement a solution to the problem. For the purpose of putting a cure into action, this was done. It is going to be necessary to add serial correlation into the error term of the model in order to do this.

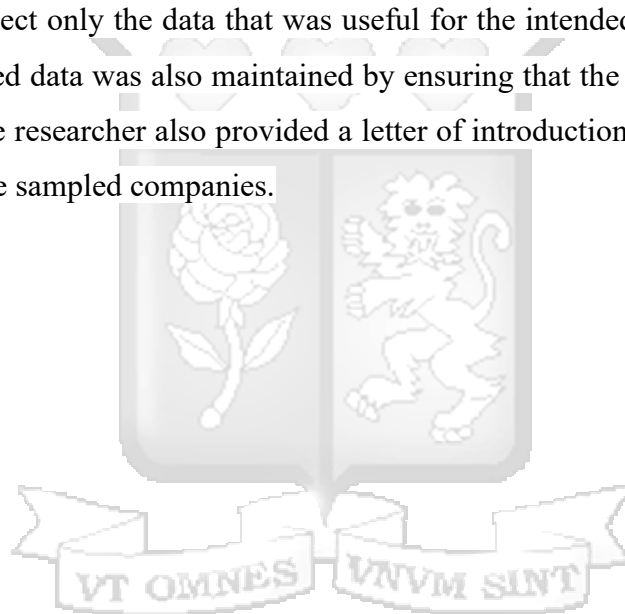
3.11.5 Stationarity Test

In order to determine whether or not a unit root is present in a series, it is important to do stationarity tests (Schaffer, 2012). There is a requirement that these examinations be carried out. In order to determine whether or not the regression is a genuine one, the purpose of this endeavor is to determine whether or not it is. The determination of whether or not variables display stationarity or whether or not a unit root effect is present can be accomplished through the application of a number of different methods. It is possible to achieve this goal by collecting information from a wide range of sources. A technique for analyzing the null hypothesis that independent variables adhere to a unit root process, the Dickey-Fuller test (ADF) was

developed by Dickey and Fuller in 1979. The ADF was named after the two individuals who developed it. Additionally, the American Defense Force was given its own name. Their names were given to this exam in recognition of the two researchers who conducted it. The null hypothesis is rejected when the Augmented Dickey-Fuller (ADF) test is used to determine stationarity and the p-value is equal to or smaller than the critical value at a significance level of 5%. This is the case when the test is performed. The conclusion that was drawn from this is that the null hypothesis would not be correct. After the null hypothesis has been disproved, it is still feasible to arrive at this conclusion.

3.12 Ethical Consideration

The researcher sought consent from the company's management to collect data. The researcher also made sure to collect only the data that was useful for the intended purpose of the study. Privacy of the collected data was also maintained by ensuring that the data was not disclosed to any third party. The researcher also provided a letter of introduction form the university to the management of the sampled companies.



CHAPTER FOUR

THE PRESENTATION OF RESEARCH RESULTS

4.1 Introduction

The chapter presents the study findings based on the study objectives. The interpretation of study findings was done using mean, standard deviation, minimum, maximum number of observations, and coefficients. The study further discussed the results using the reviewed empirical literature.

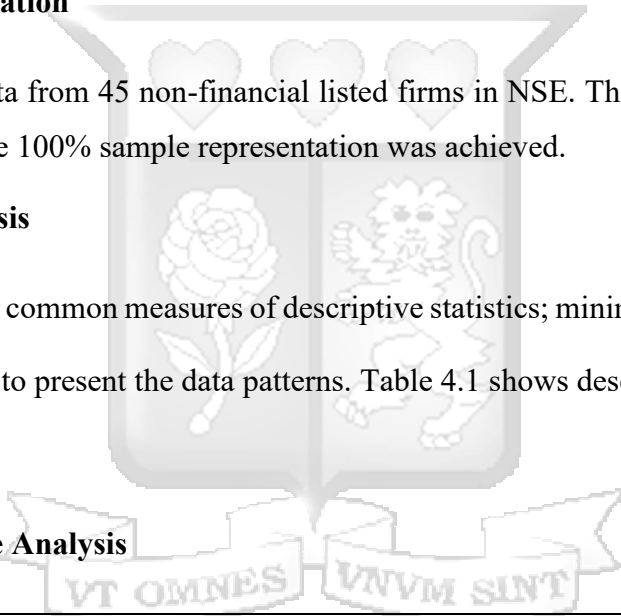
4.2 Sample Representation

The study collected data from 45 non-financial listed firms in NSE. The data for all the firms was obtained and hence 100% sample representation was achieved.

4.3 Descriptive Analysis

The study used the four common measures of descriptive statistics; minimum, maximum, mean and standard deviation to present the data patterns. Table 4.1 shows descriptive data, followed by interpretations.

Table 4.1: Descriptive Analysis



Variable	Obs	Mean	Std. Dev	minimum	Maximum
CCC	225	71.200	36.061	-35	129
ID	225	3.591	2.077	0	12
BD	225	0.632	0.186	0.027	1.394
BS	225	10.569	2.257	7	14
FA	225	66.089	33.824	15	154
Log Of FS	225	4.947	0.920	3.709	7.712
Inflation	225	0.062	0.009	0.052	0.077

Source: Researcher (2025)

The outcomes showed that the mean of cash conversion cycle for the Kenyan listed firms was 71.200 days from the year 2019 to 2023. The minimum cash conversion cycle was -35 while the maximum was 129. The standard deviation was 36.061. The results further showed that the mean of independent directors for the Kenyan listed firms was 3.591 from the year 2019 to

2023. The minimum independent directors was 0 while the maximum was 12. The standard deviation was 2.077.

The mean of board diversity for the Kenyan listed firms was 0.632 from the year 2019 to 2023. The minimum board diversity was 0.027 while the maximum was 1.394. The standard deviation was 2.077. The mean of board size for the Kenyan listed firms was 10.569 from the year 2019 to 2023. The minimum board size was 7 while the maximum was 14. The standard deviation was 2.257.

The results further showed that the mean of firm age for the Kenyan listed firms was 66.089 from the year 2019 to 2023. The minimum firm age was 15 while the maximum was 154. The standard deviation was 33.824. In addition, results showed that the mean log of firm size for the Kenyan listed firms was 4.947 from the year 2019 to 2023. The minimum firm size was 3.709 while the maximum was 7.712. The standard deviation was 0.920. The results further showed that the mean of inflation in Kenya was 0.062 from the year 2019 to 2023. The minimum inflation was 0.052 while the maximum was 0.77. The standard deviation was 0.009.

4.4 Diagnostic Tests

Diagnostic tests including normality, autocorrelation, heteroscedasticity, stationarity, multicollinearity and Hausman test were performed

4.4.1 Test for Normality

The Shapiro-Wilk test, which examines the relationship amongst facts and conforming normal scores, was used to determine whether the study's results were normal. Table 4.2 presents the results.

Table 4.2: Normality Tests

Variable	Obs	W	V	z	Prob>z
CCC	225	0.951	8.054	4.828	0.067
ID	225	0.991	1.456	0.870	0.192
BD	225	0.863	22.656	7.222	0.090
BS	225	0.989	1.838	1.409	0.079
FA	225	0.943	9.407	5.188	0.059
Log Of FS	225	0.899	16.620	6.505	0.070
inflation	225	0.951	8.180	4.864	0.089

Source: Researcher (2025)

The null hypothesis is true and the data are regarded as normal when the p-value is greater than 0.05. In cases where p values exceed 0.05, the null hypothesis remains unproven. The fact that all of the variables had a p value more than 0.05. This infers that all the variables were normally distributed.

4.4.2 Test for Multicollinearity

When there is a significant resemblance between two independent variables, multicollinearity exists. Multicollinearity was examined by use of Variance Inflation Factor. Table 4.3 displays findings:

Table 4.3: Multicollinearity

Variable	VIF	1/VIF
CCC	1.12	0.893
ID	1.09	0.921
BD	1.07	0.931
BS	1.07	0.936
FA	1.04	0.960
Log Of FS	1.01	0.987
Mean	1.07	

Source: Researcher (2025)

Table 4.3's results demonstrate the lack of multicollinearity; all variables had VIFs of less than 10, and 1.07 was the mean, which was also less than 10. In a similar vein, tolerance levels above 0.1 were found for every variable under investigation, suggesting that no variable exhibited multicollinearity.

4.4.3 Heteroskedasticity Test

Heteroskedasticity outcomes were shown in Table 4.4.

Table 4.4: Heteroskedasticity Test

Breusch Pagan test	
Ho: Constant variance	
Variable - fitted values	Cash conversion cycle
chi2 (01)	110.06
Prob > chi2	0.067

Source: Researcher (2025)

The results demonstrated that the dependent variable (Cash conversion cycle) had a value of p that was more than 0.05. As a result, we draw the inference that there is no heteroskedasticity in the data.

4.4.4 Tests on Autocorrelation

Gujarati (2004) asserts that the Durbin Watson is the most appropriate examination of autocorrelation. Table 4.5 demonstrates the autocorrelation outcomes.

Table 4.5: Outcomes for Autocorrelation

Examination for autocorrelation	
F{1, 225}	6.809
Prob> F	0.078

Source: Researcher (2025)

The coefficients are statistically negligible, the results indicated. Test-wise, the no-serial autocorrelation was successful. The test results indicate that there is a serial correlation of $0.078 > 0.05$ between the residuals. Consequently, no relationship exists in this study between the error terms for different data.

4.4.5 Stationarity Test

Unit roots in panel data are detected using panel unit root tests for stationarity. The Levin-Lin Chu test was used in this investigation to look for unit roots. Table 4.6 displays the findings.

Table 4.6: Levin Lin Chu Unit Root Test

Variable	Statistic	Prob.**	Decision
CCC	-10.8528	0.022	Stationary
ID	-3.35688	0.000	Stationary
BD	-4.99118	0.016	Stationary
BS	-4.82188	0.029	Stationary
FA	-9.30242	0.036	Stationary
Log Of FS	-4.8339	0.01	Stationary
Inflation rate	-7.1873	0.029	Stationary

Ho: The data has a unit root (Not Stationary); Reject if p-value < 0.05

Source: Researcher (2025)

Table 4.6 indicates that each variable's significance threshold for this test is set at 0.05. All of the study's variables had P-values less than 0.05, hence the alternative hypothesis—that the data is stationary and lacks a unit root—was preferred to the null hypothesis.

4.5 Correlation Analysis

Testing the link between the dependent and independent variables is often done using correlation. The study tested the relationship between board characteristics, corporate characteristics, and the cash conversion cycle in the NSE-listed companies using Pearson Correlation.

Table 4.7: Correlation Analysis

	cash conversion cycle	independent cycle	board diversity	board size	firm age	firm size
CCC	1.000					
ID	r=0.239 p=0.000	1.000				
BD	r=-0.188 p=0.005	0.024 0.724	1.000			
BS	r=0.204 p=0.002	0.170 0.011	-0.171 0.010	1.000		
FA	r=-0.070 p=0.295	0.066 0.321	0.173 0.009	0.039 0.556	1.000	
Log of FS	r=0.011 p=0.871	-0.085 0.203	0.050 0.457	-0.036 0.591	0.043 0.524	1.000
Inflation	r=0.0934 p=0.034	-0.1858	-0.2534	-0.286	0.505	1.000

Source: Researcher (2025)

The results showed that independent directors had a positive and significant association with the cash conversion cycle of firms at the Nairobi Securities Exchange ($r=0.239$, $p=0.000$). This suggests that there was a weak positive link between the cash conversion cycle of firms at the Nairobi Securities Exchange and independent directors.

The findings demonstrated a negative and substantial correlation between board gender diversity (no. of male directors / total no. of directors) and the cash conversion cycle of Nairobi Securities Exchange companies ($r=-0.188$, $p=0.005$). This suggests that there was a somewhat

negative link between board diversity (no. of male directors / total no. of directors) and the cash conversion cycle of Nairobi Securities Exchange companies.

Further results showed that board size had a positive and significant association with the cash conversion cycle of firms at the Nairobi Securities Exchange ($r=0.204$, $p=0.002$). This suggests that there was a somewhat favorable link between the board and the Nairobi Securities Exchange companies' cash conversion cycle. The findings demonstrated a negative and negligible correlation between firm age and the cash conversion cycle of Nairobi Securities Exchange companies ($r=-0.070$, $p=0.295$). This suggests that there was no relationship between independent directors and the cash conversion cycle of Nairobi Securities Exchange companies. The findings indicated that the cash conversion cycle of firms at the Nairobi Securities Exchange was positively and marginally correlated with firm size ($r=0.011$, $p=0.871$). This suggests that there was no relationship between the board and the Nairobi Securities Exchange companies' cash conversion cycle. The results also revealed that inflation was positively and significantly related to the cash conversion cycle ($r=0.0934$, $p=0.034$). This implied that inflation has a significant effect on the cash conversion cycle. This infers that the higher the inflation the higher the cash conversion cycle

4.6 Hausman Test for Model Specification

The determinant of the study's most appropriate model is by running a panel data regression model through the Hausman test. To achieve this, both the fixed and random effects models were run then Hausman test conducted. Random effect model fit is the null hypothesis; if p-value exceeds critical value, the random effect model is suitable, otherwise a fixed effects model is deployed. Shown in table 4.7 were results:

Ho: Accept the Random Effect Model

Ha: Accept the Fixed Effect Model

Table 4.8 Hausman Test

	(b) Fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.	
ID		4.94859	4.97539	-0.0268	0.2924
BD		-32.598	-32.736	0.13885	7.97334
BD		2.11731	2.21134	-0.094	0.17107
FA		1.0194	-0.0457	1.06515	0.7208
log of FS		2.00453	1.4667	0.53783	4.77781
chi2(5)	=	(b-B)'[(V_b-V_B)^(-1)](b-B)			
	=	4.21			
Prob>chi2	=	0.52			

Source: Researcher (2025)

The random effects model was applied, according to the Hausman test. In response, the only findings given and covered in the next section were those of the random effects model. The Hausman test revealed a significance level above the 0.05 level with Prob>chi2 = 0.52. Thus, the null hypothesis of the researchers is not disproved (H_0). This proves that the Random effects panel data model, which was employed, provides the best fit for the data. Therefore, only the outcomes of the random effects panel regression were reflected in the subsequent sections.

4.7 Regression Results

The inferential analysis was undertaken after subjecting the data to various tests (Kothari, 2004). Regression analysis and correlation analysis were two examples of inferential statistics that were useful in determining the relationship between the variables. Therefore, this section contains the correlation and the regression results.

4.7.1 Regression Analysis before moderation

Regression analysis was done to determine the relationship between the independent variables (board characteristics and firm characteristics) and dependent variables (cash conversion cycle).

Table 4.9: Random-effects Regression Model before moderation

	Coef.	std. err	t	P> t 	[95% conf.Interval	
ID	4.975	0.885	5.620	0.000	3.240	6.711
BD	-32.736	13.642	-2.400	0.016	-59.474	-5.999
BS	2.211	0.810	2.730	0.006	0.624	3.799
_cons	46.404	23.855	1.950	0.052	-0.352	93.159

R square=0.2360
wald chi2(3)=54.86
prob>chi2=0.000

Source: Researcher (2025)

Optimal Model

$$CC_{it} = 38.976 + 4.975ID_{it} - 32.736 BD_{it} + 2.211 BS_{it} + \mu_i$$

Where CCC is Cash Conversion Cycle

ID is independent diversity

BD is board diversity

BS is board size

The results in Table 4.9 showed that independent directors had a positive and significant effect on the cash conversion cycle ($\beta=4.975$, $p=0.000$). This suggests that among the companies listed on the NSE, a higher number of independent directors will result in a longer cash conversion cycle. Subsequent analysis revealed that the cash conversion cycle was significantly impacted negatively by board gender diversity (no. of male directors / total no. of directors) ($\beta = -32.736$, $p = 0.016$). This suggests that among the companies listed on the NSE, board gender diversity (no. of male directors / total no. of directors) shortens the cash conversion period.

In addition, results showed that board size had a positive and significant effect on the cash conversion cycle ($\beta=2.211$, $p=0.006$). This implies that an increase in board size would increase the cash conversion cycle amongst the firms listed in the NSE. Furthermore, the data indicated that the cash conversion cycle was negatively and insignificantly impacted by firm age ($\beta = -0.046$, $p = 0.703$). This suggests that among the companies listed on the NSE, the cash conversion cycle is not influenced by an increase in firm age. Furthermore, the data indicated that the cash conversion cycle was positively and marginally impacted by firm size ($\beta = 1.467$, $p = 0.690$). This suggests that among the companies listed on the NSE, the cash conversion cycle is not influenced by a company's size growth.

The coefficient of determination (R squared) result of 0.2360 shows that changes in board characteristics and firm characteristics accounted for 23.60% of variations in cash conversion cycle of listed firms. The F statistic of 54.86 provided additional evidence for this. The total model was similarly significant (p=0.000), suggesting that the business and board characteristics had a significant impact on listed firms' cash conversion cycles.

4.7.2 Regression Analysis after moderation

Regression analysis was done to determine whether inflation moderated the relationship between board characteristics and firm Characteristics and dependent variable cash conversion cycle of firms listed in NSE. Ongore and Kisa (2013) was used to test the moderator variable in this study; $CCC_{it} = \beta_0 + \beta_1 BC_{it} + \beta_2 FS_{it} + \beta_3 FA_{it} + \beta_4 M_{it} + \beta_5 BC_{it} * M_{it} + \beta_6 FS_{it} * M_{it} + \beta_7 FA_{it} * M_{it} + \mu_i$

Table 4.10: Random-effects Regression Model after moderation

	Coef.	std. err	t	P> t	[95% conf.Interval	
ID	4.096	0.863	4.75	0.000	2.405	5.787
BD	-30.436	13.365	-2.28	0.023	-56.632	-4.241
BS	2.002	0.792	2.53	0.011	0.450	3.554
FA	-0.077	0.119	-0.64	0.522	-0.311	0.158
Log of FS	1.008	3.620	0.28	0.781	-6.088	8.104
Inflation	584.808	180.681	3.24	0.001	230.679	938.936
BD*Inflation	-452.937	202.591	-2.24	0.025	-850.008	-55.866
BS*Inflation	36.849	11.560	3.19	0.001	14.192	59.506
FA*Inflation	-0.338	1.775	-0.19	0.849	-3.816	3.140
FS*Inflation	37.014	40.383	0.92	0.359	-42.135	116.163
_cons	38.976	10.598	3.68	0.000	18.205	59.748
R square=0.340						
wald chi2(3)=71.96						
prob>chi2=0.000						

Source: Researcher (2025)

Optimal Model

$$CCC_{it} = 38.976 + 4.096 ID - 30.436 BD + 2.002 BS - 0.077 FA + 1.008 FS + 584.808 I + 68.214 ID_{it} * M_{it} - 452.937 BD_{it} * M_{it} + 36.849 BS_{it} * M_{it} - 0.338 FA_{it} * M_{it} + 37.014 FS_{it} * M_{it} + \mu_i$$

Where CCC is Cash Conversion Cycle

ID is independent diversity

BD is board diversity

BS is board size

FS is firm size of firm

FA is the firm age of firm

M is inflation

The results in Table 4.10 showed that independent directors had a positive and significant effect on the cash conversion cycle ($\beta=4.096$, $p=0.000$). This implies that having more independent directors would increase the cash conversion cycle amongst the firms listed in the NSE in presence of the moderator (inflation). Additional findings indicated that the cash conversion cycle was significantly impacted negatively by board diversity ($\beta = -30.43649$, $p = 0.002$). This suggests that when a moderator is present, board gender diversity shortens the cash conversion cycle for companies listed on the NSE (inflation).

In addition, results showed that board size had a positive and significant effect on the cash conversion cycle ($\beta= 2.002$, $p=0.011$). This suggests that, in the presence of the moderator (inflation), a larger board would result in a longer cash conversion cycle among the NSE-listed companies. Furthermore, the data indicated that the cash conversion cycle was negatively and insignificantly impacted by business age ($\beta=-0.077$, $p=0.522$). This suggests that, in the presence of a moderator (inflation), the cash conversion cycle among the companies listed on the NSE is not influenced by an increase in company age. Furthermore, the data indicated that the cash conversion cycle was positively and marginally impacted by business size ($\beta = 1.008$, $p = 0.781$). This suggests that, in the presence of a moderator (inflation), the cash conversion cycle among the companies listed on the NSE is not affected by an increase in firm size.

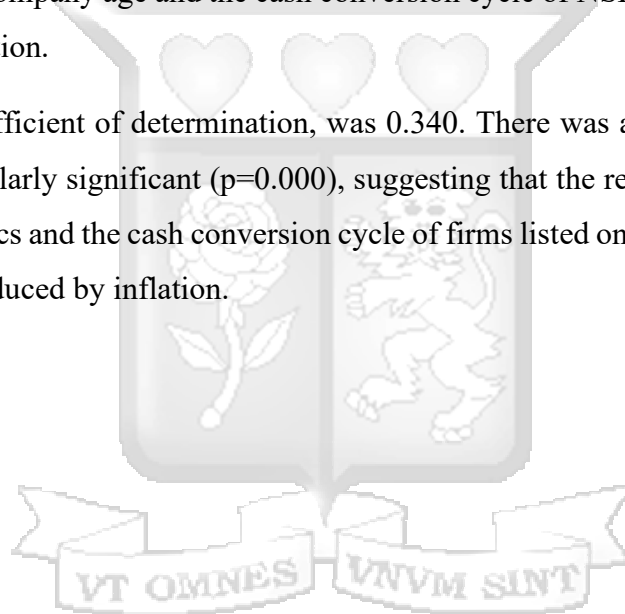
Further results showed that inflation had a positive and significant effect on the cash conversion cycle ($\beta=1.008$, $p=0.781$). The findings demonstrated a positive and substantial interaction between independent directors and inflation on the cash conversion cycle of NSE-listed companies ($\beta = 584.8075$, $p = 0.001$). This suggests that the relationship between independent directors and the cash conversion cycle of companies listed on the NSE was tempered by inflation.

Further outcomes showed that the interaction between board diversity and inflation was negative and significant on the cash conversion cycle of firms listed in NSE ($\beta=-452.937$, $p=0.025$). This suggests that the association between board diversity and the cash conversion

cycle of NSE-listed companies was tempered by inflation. The cash conversion cycle of firms listed on the NSE was found to have a positive and significant interaction between board size and inflation ($\beta = 36.849$, $p = 0.001$). This suggests that the association between board size and the cash conversion cycle of companies listed on the NSE was tempered by inflation.

Further outcomes showed that the interaction between firm age and inflation was negative and insignificant on the cash conversion cycle of firms listed in NSE ($\beta = -0.338$, $p = 0.849$). This suggests that the association between company age and the cash conversion cycle of NSE-listed companies was not mitigated by inflation. Furthermore, the results indicated that the cash conversion cycle of firms listed on the NSE was positively and marginally impacted by the interaction between firm size and inflation ($\beta = 37.014$, $p = 0.359$). This suggests that the association between company age and the cash conversion cycle of NSE-listed companies was not mitigated by inflation.

R squared, or the coefficient of determination, was 0.340. There was a 71.96 F statistic. The entire model was similarly significant ($p = 0.000$), suggesting that the relationship between the company characteristics and the cash conversion cycle of firms listed on the NSE and the board characteristics was reduced by inflation.



CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a summary of the study. The conclusions and recommendations in this section were also guided by the results and the objectives. The section also presents the areas of further studies.

5.2 Summary of the Main Findings

The findings of the correlation indicated a weak positive link between the size of the board and the number of independent directors and the cash conversion cycle of Nairobi Securities Exchange companies. On the other hand, there was only a slight inverse relationship between the cash conversion cycle of Nairobi Securities Exchange firms and board diversity. Based on regression analysis, the NSE-listed companies' cash conversion cycle was positively and significantly impacted by the number of independent directors and the size of the board. Correlation results showed that firm age and firm size had no correlation with the cash conversion cycle of firms at the Nairobi Securities Exchange. Regression results showed that firm age had a negative and significant effect on the cash conversion cycle amongst the firms listed in the NSE. The study's findings demonstrated that the association between independent directors, board diversity (no. of male directors / total no. of directors), board size, and the cash conversion cycle of companies listed on the NSE was tempered by inflation. Therefore inflation moderated the relationship between board characteristics and cash conversion cycle of companies listed on the NSE. However, inflation did not moderate the relationship between firm age, firm size and cash conversion cycle of firms listed in NSE.

5.3 Discussion of Findings

The results showed that independent directors, board size had a positive and significant effect on cash conversion cycle. The study findings agreed with Assenga et al. (2018) who indicated that board independence had a positive effect on cash conversion cycle. The study findings also agreed with Obradovich et al. (2014) who found that cash conversion cycle and inventory time are shortened when independent members are on the board of directors. This is in agreement with resource dependence theory which indicates that a larger number of independent enhances cash conversion cycle, according to the findings of Sharif et al. (2014).

Results also revealed that the cash conversion cycle was significantly impacted negatively by board diversity (no. of male directors / total no. of directors). The study findings agreed with Ullah et al. (2020) whose findings indicated a strong inverse link between company cash holdings and board diversity. The study findings also agreed with Metwally et al. (2024) who discovered that gender diversity on boards has a negative moderating effect since it reduces the correlation between cash holdings and CSR.

The results of the study supported the findings of Moustafasoliman et al. (2018), who showed a substantial relationship between the number of directors on the board and the company's financial performance. However, among the companies listed on the NSE, board diversity had a negative and significant impact on the cash conversion cycle. The study's conclusions concurred with those of EmadEldeen et al. (2021), who discovered that board diversity significantly impacted the cash conversion cycle of Nairobi Securities Exchange companies. These findings also upheld the resource dependence theory that states that unique and rare resources will lead to a better performance of a company. The board of directors in terms of independence, diversity and size come with unique skills, capabilities and intellectual capability that may lead to a better cash conversion cycle.

Furthermore, the data indicated that the cash conversion cycle was negatively and insignificantly impacted by firm age. The study findings agreed with Takon and Atseye (2015) conducted, there is a correlation between the age of a company and its profitability. However, Samosir (2018) found that there is a positive correlation between the cash conversion cycle and the age of the company. Furthermore, among the companies listed on the NSE, the data indicated that company age had a favorable and significant effect on the cash conversion cycle. The results did not support Njoroge's (2014) assertion that the company's size is a critical attribute for achieving its goals. These findings supported the assertion in the liquidity preference theory that asserts that deployment of an effective liquidity management system is one of the most critical needs that must be met and is not dependent on the size or structure of the company.

Furthermore, the data indicated that the cash conversion cycle was positively and marginally impacted by firm size. The study findings agreed with Naran (2013) who revealed that there is a substantial connection between voluntary disclosure, the size of the organization, and financial performance. The study findings agreed with Muhindi and Ngaba (2018) who found that firm size had a significant effect on financial performance on banks. From liquidity

preference theory, the cash conversion cycle remains the same regardless of the size or structure of the company.

The third objective was to determine the moderating role of inflation rate on the relationship between board characteristics and firm characteristics on the cash conversion cycle of Listed Firms in Kenya. The results showed that inflation moderated the relationship between board diversity and the cash conversion cycle of companies listed on the NSE was tempered by inflation. The results showed that inflation moderated the relationship between board size and the cash conversion cycle of companies listed on the NSE was tempered by inflation. The results showed that inflation did not moderate the relationship between firm age and the cash conversion cycle of companies listed on the NSE was tempered by inflation. The results showed that inflation did not moderate the relationship between firm size and the cash conversion cycle of companies listed on the NSE was tempered by inflation. The study findings agreed with Mathuva (2014), who found that the CCC and firm-specific components were not affected by the rate of inflation.

5.4 Conclusions of the Study

5.4.1 Board Characteristics and Cash Conversion Cycle

The study concluded that that board characteristic (independent directors, board size) had a significant association with the cash conversion cycle of firms at the Nairobi Securities Exchange. Board diversity enhances the decision making of the board which improves the corporate governance. In addition, the positive effect of board size on cash conversion cycle might be as a result increased complexity that leads to ineffective control as a result of the large board which may lead to increased cash conversion cycle. Further board independence only results in an increased cash conversion cycle. This is in agreement with the resource dependence theory that showed a connection between the cash conversion cycle and board attributes such as independence, diversity, and size.

5.4.2 Firm Characteristics and Cash Conversion Cycle

The study concluded that that firm characteristic had a significant association with the cash conversion cycle of firms at the NSE. Therefore, having larger businesses does not necessarily mean there is a need for high working capital. In addition, firm age had no significant effect on the cash conversion cycle of firms at the Nairobi Securities Exchange. Further, firm size had

no significant effect on the cash conversion cycle. Therefore, WCM does not necessarily increase with the age of the firms.

5.4.3 Board Characteristics, Firm Characteristics Inflation and Cash Conversion Cycle

The study also concluded that inflation moderated the relationship between board characteristics and cash conversion cycle of firms listed in NSE. The link between firm age, business size, and cash conversion cycle of NSE-listed enterprises was not, however, mitigated by inflation. Almost every aspect of the working capital cycle—order-to-cash, procure-to-pay, and forecast-to-fulfill—is impacted by inflation, and every function inside a company engages with the cycle in some way. Companies that are less flexible may look lucrative as long as inflation stays high, but in reality, they are losing creditworthiness and purchasing power.

5.5 Recommendations for Practitioners and Policy Makers

5.5.1 Recommendations for Policy and Practice

The Capital Markets Authority (CMA) and the Nairobi Securities Exchange (NSE) should formulate and implement policies to promote board diversity in listed companies. This can be achieved through regulations, guidelines, and incentives that encourage boards to include individuals with diverse backgrounds, skills, and experiences

Policy makers could also help the NSE firms to increase their asset base. This can be done by pursuing several strategies, including acquiring new assets through investment or debt, improving sales and profitability, and effectively managing existing assets. To combat inflation in Nairobi, the Kenyan government should implement a combination of fiscal and monetary policies, focusing on reducing aggregate demand and increasing the supply of goods and services

From the study findings, board size had a positive and significant effect on the cash conversion cycle of firms listed in NSE. This study therefore recommends that firms listed in NSE should maintain an optimal size of the board members. The listed firm's management should ensure that there is not so much freedom of the board of directors since board independence increases cash conversion cycle due to the high risk of information asymmetry amongst the independent directors. Legislators ought to enact measures that promote diversity on the board among board members. This would guarantee the fusion of concepts that would best serve the SACCOs' performance, encompassing both genders.

NSE firms should not consider firm age as important since it had an insignificant effect on the cash conversion cycle. In addition, the NSE firm managers should also not put into consideration their firm sizes since it also had no effect on their cash conversion cycle.

Furthermore, it was shown that the relationship between the cash conversion cycle and the board characteristics was impacted by inflation. Thus, businesses can add value by building up their inventory, but only to the extent necessary to optimize returns and minimize holding costs while accounting for the effects of inflation and the cash conversion cycle. In doing so, the finance managers should monitor their varied industry averages and practices and keep the cash conversion cycle brief.

5.5.2 Recommendations for Theory

Though the Liquidity Preference Theory helps to explain the cash conversion cycle, the theory fails to clearly show the factors that contribute to cash conversion theory. This study added to this theory by showing what firms should do to maintain a short cycle. From this study firms should maintain board diversity as well as work on increasing their asset base. This will enhance and minimize the cash conversion cycle.

Resource dependence theory offers a strong basis for the epistemological system of corporate governance. The theory also shows how firm resources help to minimize the cash conversion cycle. This study however adds to the resource dependence theory as it shows the specific resources (board independence and board diversity) that the firm needs so as to minimize the cash conversion cycle.

5.6 Limitations of the Study

This project was limited only to 45 listed companies in Kenya and the utilization of secondary data included the data from the NSE reports. Thus, not all listed firms qualified to be included in the study and only secondary data from the 45 selected listed firms was utilized. The study also relied on secondary data from the financial statements of the NSE firms in Kenya. While these are a reliable source of data, it is quantitative in nature and therefore it was not possible to fully interrogate issues of the NSE firms as may have been the case if interviews were conducted. The time period was also limited as the data collected was only for 5 years. This might not provide robust results as to the long-term relationship between the study variables. A longer period, of say 10 years, would have been preferred to be able to conduct a long time series or panel analysis.

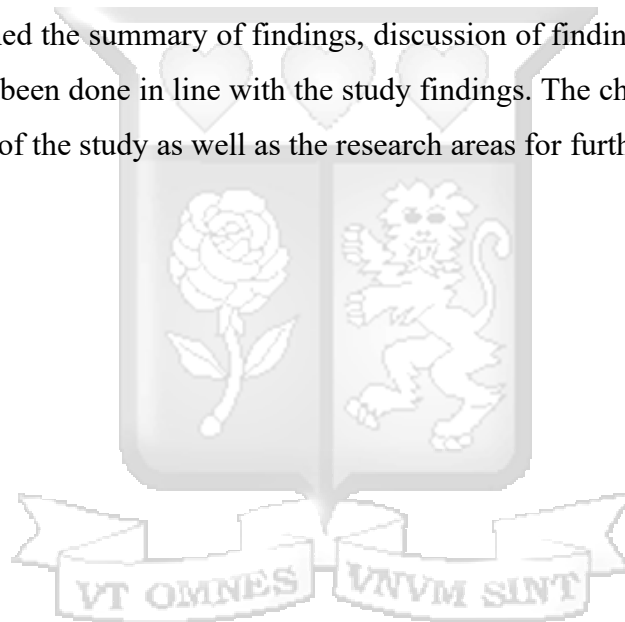
5.7 Research Areas for Further Study

The study focused on the effect of board, firm characteristics and cash conversion cycle in Kenyan Listed Firms, moderated by inflation. The study was done in Kenya and thus further studies can focus on other firms listed in other East African countries such as Uganda and Tanzania.

In addition, the R squared was not 100% implying that there are other board characteristics that affect cash conversion cycle in Kenyan Listed Firms, moderated by inflation. Therefore, other studies should focus on such factors as board composition, board committee.

5.8 Chapter Summary

The chapter has outlined the summary of findings, discussion of findings and the conclusions of the study. This has been done in line with the study findings. The chapter has also outlined the recommendations of the study as well as the research areas for further study.



REFERENCES

- Abbas, M., Aslam, M. A., Naheed, K., & Aamir, M. (2019). Interrelationship among corporate governance, working capital management, and firm performance: panel study from Pakistan. *Paradigms*, 13(1), 75-81. DOI: 10.24312/1800064130112
- Abuzayed, B., Ben Ammar, M., Molyneux, P., & Al-Fayoumi, N. (2019). Corruption, lending and bank performance.
- Affes, W., and Jarboui, A. (2023). The impact of corporate governance on financial performance: a cross-sector study. *International Journal of Disclosure and Governance* 20, 374–394. <https://doi.org/10.1057/s41310-023-00182-8>
- Ahmad, M., Kuldasheva, Z., Ismailova, N., Balbaa, M. E., Akramova, N., & Ain, N. U. (2024). Effect of the Supply-Side factors on inflation in South Asia: An analysis of oil price, technology, and labor market dynamics. *Research in Globalization*, 8, 100210. <https://doi.org/10.1016/j.resglo.2024.100210>
- Aifuwa, H. O., & Embele, K. (2019). Board characteristics and financial reporting. *Journal of Accounting and Financial Management*, 5(1), 30-44. <https://ssrn.com/abstract=3394421>
- Ajanthan, A., & Kumara, K. U. (2017). Corporate governance and cash holdings: Empirical evidence from an emerging country, Sri Lanka. *International Journal of Accounting and Financial Reporting*, 7(2), 112-128. DOI: [10.52996/ijafr.v7i2.12137](https://doi.org/10.52996/ijafr.v7i2.12137)
- Ali, I., Kumar, S. V., & Gusev, V. D. (2024). Determinants of Inflation in Pakistan: A Comprehensive Analysis of Macroeconomic Variables (1991–2022). *Мир новой экономики*, 18(3), 96-113. <https://cyberleninka.ru/article/n/determinants-of-inflation-in-pakistan>
- Al-Matari, Y. A. (2022). Do the characteristics of the board chairman have an effect on corporate performance? Empirical evidence from Saudi Arabia. *Heliyon*, 8(4). [https://www.cell.com/heliyon/fulltext/S2405-8440\(22\)00574-6](https://www.cell.com/heliyon/fulltext/S2405-8440(22)00574-6)
- Amato, P. R. (2004). Tension between institutional and individual views of marriage. *Journal of Marriage and the Family*, 959-965. <https://www.jstor.org/stable/3600169>
- Asman, F. N., Fernandez, D., Jamaludin, N. A., Zaki, H. O., & Ghazali, A. W. (2022). Cash Conversion Cycle and Firm's Performance. *Social Sciences*, 12(11), 2682-2692. DOI: [10.6007/IJARBSS/v12-i11/15276](https://doi.org/10.6007/IJARBSS/v12-i11/15276)
- Assenga, M. P., Aly, D., & Hussainey, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. *Corporate Governance: The international journal of business in society*, 18(6), 1089-1106. <https://doi.org/10.1108/CG-09-2016-0174>
- Attari, M. A., & Raza, K. (2012). The optimal relationship of cash conversion cycle with firm size and profitability. *International journal of academic Research in business and social sciences*, 2(4), 189. file:///C:/Users/User/Downloads/cashconversioncycle.pdf
- Bajpai, N. (2011). *Business Research Methods*. Pearson Education India. 9332511756, 9789332511750
- Bintara, R. (2020). The effect of working capital, liquidity and leverage on profitability. *Saudi Journal of Economics and Finance*, 4(01), 28-35. <http://saudijournals.com/sjef/>

- Borlea, S. N., Achim, M. V. & Mare, C. (2017). Board characteristics and firm performances in emerging economies. *Lessons from Romania, Economic Research-Ekonomska Istraživanja*, 30(1), 55-75. <https://doi.org/10.1080/1331677X.2017.1291359>
- Carpenter, R. E., & Petersen, B. C. (2002). Is the growth of small firms constrained by internal finance?. *Review of Economics and Statistics*, 84(2), 298-309. <https://www.jstor.org/stable/3211778>
- Chang, C. C. (2022). Cash conversion cycle and corporate performance: Global evidence. In *Encyclopedia of Finance* (pp. 2597-2626). Cham: Springer International Publishing. DOI: 10.1007/978-3-030-91231-4_109
- Charitou, M. S., Elfani, M., & Lois, P. (2010). The Effect of Working Capital Management on Firms Profitability: Empirical Evidence from An Emerging Market. *Journal of Business & Economics Research (JBER)*, 8(12), 63-68. <https://doi.org/10.19030/jber.v8i12.782>
- Chick, V. (2019). Liquidity preference. In *The Elgar Companion to John Maynard Keynes* (pp. 249-254). Edward Elgar Publishing.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). London: Routledge. <https://doi.org/10.4324/9780203720967>
- Cooper, D.R. and Schindler, P.S. (2014) *Business Research Methods*. 12th Edition, McGraw Hill International Edition, New York. DOI: [10.4236/vp.2023.92003](https://doi.org/10.4236/vp.2023.92003)
- Creswell, J.W. (2013) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4th Edition, SAGE Publications, Inc., London. https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf
- Danoshana, S., & Ravivathani, T. (2019). The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka. *SAARJ Journal on Banking & Insurance Research*, 8(1), 62-67. DOI : [10.5958/2319-1422.2019.00004.3](https://doi.org/10.5958/2319-1422.2019.00004.3)
- Davis, G. F. and J. A. Cobb (2010) "Resource dependence theory: Past and future." Stanford's organization theory on the Marketization of the Nonprofit Sector: *Civil Society at Risk?* *Public Administration Review*, (64)2: 132-140. https://webuser.bus.umich.edu/gfdavis/Papers/davis_cobb_09_RSO.pdf
- Deloof, M. (2003). Does Working Capital Management Affect Profitability of Belgian Firms? *Journal of Business Finance Accounting*, 30, 573-588. <https://doi.org/10.1111/1468-5957.00008>
- Dickey, D.A. and Fuller, W.A. (1979) Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association*, 47, 427-431. <https://doi.org/10.2307/2286348>
- Doğan, M. (2013). Does firm size affect the firm profitability? Evidence from Turkey. *Research journal of finance and accounting*, 4(4), 53-59. <https://core.ac.uk/download/pdf/234629457.pdf>
- Doğan, M. (2013). Does firm size affect the firm profitability? Evidence from Turkey. *Research journal of finance and accounting*, 4(4), 53-59. <file:///C:/Users/User/Downloads/4977-7054-1-PB.pdf>
- Doornik, J. A., & Hansen, H. (2008). An Omnibus Test for Univariate and Multivariate Normality. *Oxford Bulletin of Economics and Statistics*, 70, 927-939. <https://doi.org/10.1111/j.1468-0084.2008.00537.x>

- Easterby-Smith, M. (2012). Management Research (pp. 66, 223, 245). Sage. DOI: [10.4236/ti.2012.33019](https://doi.org/10.4236/ti.2012.33019)
- Eggertsson, T., & Herbertsson, T. T. (2009). System failure in Iceland and the 2008 global financial crisis. *Hentet*, 5, 2010. <https://doi.org/10.1093/restud/rdad085>
- Elizalde, C. (2003). Working Capital Management in Latin America. *The Receivables opportunity*. Citigroup. <https://www.jpmorgan.com/insights/payments/trade-and-working-capital/working-capital-index-latam-2023>
- EmadEldeen, R., Elbayoumi, A. F., Basuony, M. A., & Mohamed, E. K. (2021). The effect of the board diversity on firm performance: An empirical study on the UK. *Corporate Ownership & Control*, 18(3), 337-347. DOI: [10.22495/COCV18I3SIART8](https://doi.org/10.22495/COCV18I3SIART8)
- Erem C. I. (2021). Does Cash Conversion Cycle Affect Firm Profitability? Evidence from the Listed Small and Medium-Sized Enterprises. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi*, 16(1), 110 – 123. DOI: [10.17153/ogu_iibf.853862](https://doi.org/10.17153/ogu_iibf.853862)
- Farhan, N. H., Almaqtari, F. A., Al-Homaidi, E. A., & Tabash, M. I. (2021). Board of directors' composition, cash conversion cycle and firms' performance: empirical evidence from India. *International Journal of Sustainable Economy*, 13(2), 197-218. *ij suse:v:13:y:2021:i:2:p:197-218*
- Farris II, T. M and Hutchison, P. D. (2002). Cash-to-cash: The new supply chain management metric. *International Journal of Physical Distribution & Logistics Management*, 32(3/4); 28-34. DOI: [10.1108/09600030210430651](https://doi.org/10.1108/09600030210430651)
- Fazzari, S., Hubbard, R. G., & Petersen, B. (1988). Investment, financing decisions, and tax policy. *The American economic review*, 78(2), 200-205. https://econpapers.repec.org/article/aeaecrev/v_3a78_3ay_3a1988_3ai_3a2_3ap_3a200-205.htm
- Fitzmaurice, G.M., Laird, N.M. and Ware J.H. (2004) Applied longitudinal analysis. John Wiley & Sons, Hoboken. DOI: [10.1002/9781119513469](https://doi.org/10.1002/9781119513469)
- Gentry, J. A., Vaidyanathan, R., & Lee, H. W. (1990). A Weighted Cash Conversion Cycle. *Financial Management*, 19(1), 90–99. <https://doi.org/10.2307/3666040>
- Glaser J. (2014). Suspect race: Causes and consequences of racial profiling. New York, NY: Oxford University Press. <https://www.amazon.com/Suspect-Race-Causes-Consequences-Profilng/dp/0195370406#:~:text=In%20Suspect%20Race%2C%20social%20psychol,make%20discriminatory%20judgments%20and%20decisions>
- Goddard, J., Tavakoli, M., & Wilson, J. O. (2005). Determinants of profitability in European manufacturing and services: evidence from a dynamic panel model. *Applied financial economics*, 15(18), 1269-1282. <https://doi.org/10.1080/09603100500387139>
- Greene, W.H. (2008) Econometric Analysis. 6th Edition, Pearson Prentice Hall, Upper Saddle River. DOI: [10.4236/gep.2015.310006](https://doi.org/10.4236/gep.2015.310006)
- Gschwandtner, A., & Hirsch, S. (2018). What drives firm profitability? A comparison of the US and EU food processing industry. *The Manchester School*, 86(3), 390-416. <https://doi.org/10.1111/manc.12201>
- Guluma, T.F. (2021). The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. *Future Business Journal* 7(50). <https://fbj.springeropen.com/articles/10.1186/s43093-021-00093-6>

- Halim, H., Astuty, P., & Hubeis, M. (2022). Effect of inflation, consumption credit on purchase power of the community. *International Research Journal of Management, IT and Social Sciences*, 9(2), 226-234. <https://doi.org/10.21744/irjmis.v9n2.2049>
- Hanafi, M. (2004). Approche PLS: une hiérarchie des stratégies pour la détermination des variables latentes. *Actes des 36èmes journées de statistique de la SFDS-Montpellier*, 26.
- Harris, O., & Hampton, J. (2022). Director co-option and the cash conversion cycle. *Journal of Corporate Accounting & Finance*, 33(2), 129-141. <https://doi.org/10.1002/jcaf.22540>
- Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review*, 4, 7-26. <https://ssrn.com/abstract=794804>
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management* 35: 1404–1427. DOI: [10.1177/0149206309343469](https://doi.org/10.1177/0149206309343469)
- Holtz-Eakin, D., Joulfaian, D., & Rosen, H. S. (1994). Sticking it out: Entrepreneurial survival and liquidity constraints. *Journal of Political economy*, 102(1), 53-75. <http://dx.doi.org/10.1086/261921>
- Hsu, C. S., Lai, W. H., & Yen, S. H. (2019). Boardroom diversity and operating performance: the moderating effect of strategic change. *Emerging Markets Finance and Trade*, 55(11), 2448-2472. <https://doi.org/10.1080/1540496X.2018.1519414>
- Huynh, N. (2011). The influence of working capital management on profitability of listed companies in the Netherlands. University of Twente, s1062980. https://essay.utwente.nl/62755/1/Master_thesis_-_Ngoc_Trinh_Huynh_-_final_version.pdf
- Irungu, A. M. (2019). *Effect of firm level factors on financial performance of listed firms in the Nairobi Securities Exchange* (Doctoral dissertation, JKUAT-COHRED). URI: <http://hdl.handle.net/123456789/5046>
- Isik, O., & Ince, A. R. (2016). Board size, board composition and performance: An investigation on Turkish banks. *International Business Research*, 9(2), 74-84.
- Jiang, C., Chua, R.Y.J, Kotabe, M. and Murray, J. (2011). Effects of Cultural Ethnicity, Firm Size, and Firm Age on Senior Executives' Trust in Their Overseas Business Partners: Evidence from China. *Journal of International Business Studies* 42(9), 1150–1173. DOI: [10.1057/jibs.2011.35](https://doi.org/10.1057/jibs.2011.35)
- Jones, G. R. (2013). *Organizational Theory, Design and Change* (7th ed.). Pearson. ISBN: 978-0-13-272994-9
- Kagzi, M., & Guha, M. (2018). Does board demographic diversity influence firm performance? Evidence from Indian-knowledge intensive firms. *Benchmarking: An International Journal*, 25(3), 1028-1058. <https://doi.org/10.1108/BIJ-07-2017-0203>
- Kamau, A. (2023). *Innovation Orientation and Firm Performance: The Role of Organizational Commitment Among Commercial Banks in Meru County, Kenya* (Doctoral dissertation, KeMU). URI <http://repository.kemu.ac.ke/handle/123456789/1620>
- Kantudu, A. S., Bahamman, S. M., & Mohammad, S. (2016). *Corporate Governance Mechanism And Cash Conversion Cycle Management Of Listed Conglomerates In Nigeria: Corporate Governance Mechanism And Cash Conversion Cycle Management*

- Of Listed Conglomerates In Nigeria. *Ilimi Journal of Arts and Social Sciences*, 2(1), 23-40. <https://gsujournals.com.ng/ijass/index.php/ijass/article/download>
- Karim, R., Al Mamun, M. A., & Kamruzzaman, A. S. M. (2023). Cash conversion cycle and financial performance: evidence from manufacturing firms of Bangladesh. *Asian Journal of Economics and Banking*, (ahead-of-print). <https://doi.org/10.1108/AJEB-03-2022-0033>
- Khalid, z. (2023). A Note on Cross-Panel Data Techniques. *Latest Developments in Econometrics*. 1 (1): 1–7. <https://ssrn.com/abstract=4337344>
- Kimutai, B. (2023). *Firm-specific factors and share liquidity of 20 share index Constituent companies listed at the Nairobi Securities Exchange* (Doctoral dissertation, Africa Nazarene University). URI <http://repository.anu.ac.ke/handle/123456789/941>
- Kogan, L., & Tian, M. (2012). Firm characteristics and empirical factor models: a data-mining experiment. <https://www.federalreserve.gov/econres/ifdp/firm-characteristics-and-empirical-factor-models-a-data-mining-experiment>
- Kothari, C.R. (2011) *Research Methodology: Methods and Techniques*. New Age International, New Delhi. DOI: [10.4236/ajbm.2014.412080](https://doi.org/10.4236/ajbm.2014.412080)
- Larkin, Y., Ng, L., & Zhu, J. (2018). The fading of investment-cash flow sensitivity and global development. *Journal of Corporate Finance*, 50, 294-322. DOI: 10.1016/j.jcorpfin.2018.04.003
- Lasisi, T. I. (2017). *The Relationship between corporate governance and organizational performance in Nigerian companies* (Doctoral dissertation, Walden University). <https://scholarworks.waldenu.edu/dissertations/3399>
- Majeed, S., Makki, M. A., Saleem, S., & Aziz, T. (2013). The relationship of cash conversion cycle and profitability of firms: An empirical investigation of Pakistani firms. *Journal of Emerging Issues in Economics, Finance and Banking*, 1(1), 35-51. <https://www.semanticscholar.org/paper/The-Relationship-of-Cash-Conversion-Cycle-and-of-An-Majeed-Makki/f7c20e25369cb09be29de8b00d0e8b8564f1369a>
- Matar, A., & Eneizan, B. M. (2018). Determinants of financial performance in the industrial firms: Evidence from Jordan. *Asian Journal of Agricultural Extension, Economics & Sociology*, 22(1), 1-10. DOI: 10.9734/AJAEES/2018/37476
- Mathuva, D. M. (2016). Drivers of financial and social disclosure by savings and credit cooperatives in Kenya: A managerial perspective. *Journal of Co-operative Organization and Management*, 4(2), 85-96. <https://www.sciencedirect.com/science/article/abs/pii/S2213297X16300143>
- Maxwell, J.A. (2012) *Qualitative Research Design: An Interactive Approach*. Sage Publications, Inc., Thousand Oaks, CA. https://www.researchgate.net/publication/43220402_Qualitative_Research_Design_An_Interactive_Approach_JA_Maxwell
- McInnes, L., Healy, J. and Melville, J. (2018) UMAP: Uniform Manifold Approximation and Projection for Dimension Reduction. <https://doi.org/10.48550/arXiv.1802.03426>
- Metwally, A. B. M., Aly, S. A. S., & Ali, M. A. S. (2024). The Impact of Corporate Social Responsibility on Cash Holdings: The Moderating Role of Board Gender Diversity. *International Journal of Financial Studies*, 12(4), 104. <https://doi.org/10.3390/ijfs12040104>

- Moshirian, F., Nanda, V., Vadilyev, A., & Zhang, B. (2017). What drives investment–cash flow sensitivity around the World? An asset tangibility Perspective. *Journal of Banking & Finance*, 77, 1-17. DOI: 10.1016/j.jbankfin.2016.12.012
- Mostafa Hamdy Rady, A. (2023). The Nexus between Board Composition and the Optimization of Working Capital Management Efficiency: An Empirical Study on the Egyptian Stock Exchange. 47(4), 431-485. file:///C:/Users/User/Downloads/Volume 47-Issue 4-Page 431-485.pdf
- Moustafasolimian, M., Atty, A. M. A. & Youssef, A. E. (2018). The effect of Board of Directors characteristics on firm’s financial performance: An empirical study on the most active firms in the Egyptian Stock Exchange. *Open Access Library Journal*, 5(11), 1-19.
- Mugenda, A. G. & Mugenda, O. M. (2013). *Research methods dictionary*. Nairobi: Applied. <http://ir-library.ku.ac.ke/handle/123456789/8329>
- Muhindi, K. A., & Ngaba, D. (2018). Effect of firm size on financial performance on banks: Case of commercial banks in Kenya. *International Academic Journal of Economics and Finance*, 3(1), 175-190. http://www.iajournals.org/articles/iajef_v3_i1_175_190.pdf
- Munyradadzi, R. M., Padia, N., & Callaghan, C. W. (2016). Board composition, board size and financial performance of Johannesburg stock exchange companies. *South African Journal of Economic and Management Sciences*, 19(4), 497. DOI: <http://dx.doi.org/10.17159/2222-3436/2016/v19n4a3>
- Musamali, R., & Muleli, M. (2023). *Effects of Business Environment on Private Firms' Capital Investments in Kenya*. Kenya Institute for Public Policy Research and Analysis. <https://www.researchgate.net/profile/Rodgers->
- Mwangi, M. W. (2019). *Cash Conversion Cycle Variables and Profitability of Listed Manufacturing Firms in the Nairobi Securities Exchange, Kenya* (Doctoral dissertation, United States International University-Africa). URI: <http://erepo.usiu.ac.ke/11732/4958>
- Myers, J., L. & Well, A.D. (2010) *Research Design and Statistical Analysis*. New York: Routledge. <https://doi.org/10.4324/9780203726631>
- National Stock Exchange (2025). Listed Companies. <https://www.nse.co.ke/listed-companies/>
- Nienhüser, W. (2008). Resource Dependence Theory: How well does it Explain Behavior of Organizations? *Management Revue*, 19(1+2), 9-32. <https://hdl.handle.net/10419/78991>
- Nkundabanyanga, S. K., Mugumya, E., Nalukenge, I., Muhwezi, M. & Jejjemba, G. M. (2019). Firm characteristics, innovation, financial resilience and survival of financial institutions. *Journal of Accounting in Emerging Economies*, 10(1), 48-73. DOI: 10.1108/JAEE-08-2018-0094
- Nwude, E. C., Agbo, E. I., & Christian Ibe-Lamberts, C. I. L. (2018). Effect of cash conversion cycle on the profitability of public listed insurance companies. *International Journal of Economics and Financial Issues*, 8(1), 111-117. <https://www.econjournals.com/index.php/ijefi/article/view/5874>
- Obalemo, A. O., Opusunju, M. I., & Jiya, N. S. (2020). Effect of cash conversion cycle period on the profitability of selected food and beverage companies in Nigeria. *International Journal of Management Studies and Social Science Research*, 4(1), 108-115. <https://www.ijmsssr.org/paper/IJMSSSR00122.pdf>

- Obradovich, J., Gill, A., & Biger, N. (2014). The impact of independent directors on the cash conversion cycle of American manufacturing firms. DOI: [10.5539/ijef.v7n1p87](https://doi.org/10.5539/ijef.v7n1p87)
- Ogiriki, T., & Andabai, P. W. (2014). Liquidity preference theory: A comparison of William Baumol's and James Tobin's propositions. *African Research Review*, 8(4), 143-152.
- Oseifuah, E. K. (2016). Cash Conversion Cycle theory and corporate profitability. In *Cash Conversion Cycle theory and corporate profitability: Oseifuah, Emmanuel Kojo*. <http://hdl.handle.net/11159/1419>
- Panico, C. (2018). Keynes, the Labour Party and central bank independence. In *Money, Finance and Crises in Economic History* (pp. 173-186). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315108971>
- Parguez, A. (2016). Economic theories of social order and the origins of the euro. *International Journal of Political Economy*, 45(1), 2-16. <https://doi.org/10.1080/08911916.2016.1159079>
- Pfeffer, J., & Salancik, G.R. 2003. The external control of organizations: A resource dependence perspective: Stanford, CA: Stanford University Press. ISBN: 9780804747899
- Priyatno, D. (2017). Panduan Praktis Olah Data Menggunakan SPSS. Yogyakarta: Penerbit Andi
- Rejeb, W., Berraies, S. and Talbi, D. (2020). The contribution of board of directors' roles to ambidextrous innovation: Do board's gender diversity and independence matter? *European Journal of Innovation Management*, 23(1), 40-66. DOI: 10.1108/EJIM-06-2018-0110
- Ruguru, A. N. (2023). Effect of Cash conversion Cycle on Profitability: A case study of Binathman Household Supermarkets in Kenya. *South Sahara Multidisciplinary Journal*, 1(1), 8-16. DOI: <https://doi.org/10.61250/ssmj/v1.i1.2>
- Sadia, F. (2013). Determination of the best fit probability distribution for annual extreme precipitation in Bangladesh. *European Journal of Scientific Research*, 103(3), 391-404. <https://www.researchgate.net/profile/Inda-Sukati>
- Samosir, F. C. (2018). Effect of Cash Conversion Cycle, Firm Size, and Firm Age to Profitability. *Journal of Applied Accounting and Taxation*, 3 (1) 50-57. <https://media.neliti.com/media/publications/240980-effect-of-cash-conversion-cycle-firm-siz-92e1447b.pdf>
- Saunders, M., Lewis, P. and Thornhill, A. (2012) Research Methods for Business Students. Pearson Education Ltd., Harlow. DOI: [10.4236/me.2019.104080](https://doi.org/10.4236/me.2019.104080)
- Schoenmaker, D., Schramade, W., & Winter, J. (2023). Corporate governance beyond the shareholder and stakeholder model. *Erasmus L. Rev.*, 16, 27. <https://www.elevenjournals.com/tijdschrift/ELR/2023/1/ELR-D-22-00040.pdf>
- Sekaran, U. and Bougie, R. (2016) Research Methods for Business: A Skill-Building Approach. 7th Edition, Wiley & Sons, West Sussex. DOI: [10.4236/vp.2023.92003](https://doi.org/10.4236/vp.2023.92003)
- Seo, H., Tompkins, D. L., & Yi, S. (2014). Board independence and corporate cash holding. *Journal of Finance and Accountancy*, 15(1). <https://aabri.com/manuscripts/131627.pdf>

- Sharif, S. P. and Yeoh, K. K. (2014). "Independent Directors' Resource Provision Capability in Publicly-listed Companies in Malaysia. *Corporate Ownership and Control* 11(3): 113–121. <https://ssrn.com/abstract=2822679>
- Shirangi, M.G., & Durlofsky, L.J. (2016). A general method to select representative models for decision making and optimization under uncertainty. *Computers & Geosciences*, 96, 109-123. DOI:[10.1016/j.cageo.2016.08.002](https://doi.org/10.1016/j.cageo.2016.08.002)
- Sugathadasa, D. D. K. (2018). The relationship between cash conversion cycle and firm profitability: Special reference to manufacturing companies in Colombo Stock Exchange. *Journal of Economics and Finance*, 9(6), 38-47. DOI:[10.9790/5933-0906023847](https://doi.org/10.9790/5933-0906023847)
- Takon, S. M. and Atseye, F. A. (2015). Effect of working capital management on firm profitability in selected Nigerian quoted companies. *International Journal of Economics, Commerce and Management*, 3(10); 414-438. <https://ijecm.co.uk/wp-content/uploads/2015/10/31027.pdf>
- Thomas, F. B. (2022). The role of purposive sampling technique as a tool for informal choices in a social Sciences in research methods. *Just Agriculture*, 2(5), 1-8.
- Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance: The international journal of business in society*, 12(5), 656-674. <https://doi.org/10.1108/14720701211275587>
- Ullah, I., Zeb, A., Shah, S. H. A., & Awais, M. (2020). Board Diversity And Firm's Cash Holdings: Evidence From Pakistan. https://www.researchgate.net/publication/352996277_Board_Diversity_And_Firm's_Cash_Holdings_Evidence_From_Pakistan_Irfan_Ullah
- Vogt, P., & Johnson, B. (2011). *Dictionary of Statistics and Methodology*. London: Sage. DOI:[10.4135/9781071909751](https://doi.org/10.4135/9781071909751)
- Vuong, Q. H., La, V. P., Vuong, T. T., Ho, M. T., Nguyen, H. K., Nguyen, V. H., Pham, H. H., and Ho, M. T. (2018). An open database of productivity in Vietnam's social sciences and humanities for public use". *Scientific Data*. 5. <https://www.nature.com/articles/sdata2018188>
- Waithaka, S.M., Gakure, R.W., & Wanjau, K.L. (2013). The effects of board characteristics on microfinance institutions' social performance in kenya. *European Journal of Business and Innovation Research*, 1(1), 26-43. DOI: <https://doi.org/10.37745/ijbsber.2013>
- Wang, B. (2019). The cash conversion cycle spread. *Journal of financial economics*, 133(2), 472-497.
- Xia, B. S., & Gong, P. (2015). Review of business intelligence through data analysis. *Benchmarking*, 21(2), 300-311. DOI:[10.1108/BIJ-08-2012-0050](https://doi.org/10.1108/BIJ-08-2012-0050)
- Yakubu, I. N., Alhassan, M. M., & Fuseini, A. A. (2017). The impact of working capital management on corporate performance: Evidence from listed non-financial firms in Ghana. <https://www.eajournals.org/wp-content/uploads/The-Impact-of-Working-Capital-Management-on-Corporate-Performance-Evidence-from-Listed-Non-Financial-Firms-in-Ghana.pdf>
- Zakari, M., & Saidu, S. (2016). The impact of cash conversion cycle on firm profitability: Evidence from Nigerian listed telecommunication companies. *Journal of Finance and Accounting*, 4(6), 342-350. DOI:[10.11648/j.jfa.20160406.15](https://doi.org/10.11648/j.jfa.20160406.15)

- Zaman, K. A (2023). Note on Cross-Panel Data Techniques. *Latest Developments in Econometrics*; 1(1), 1-7. <https://ssrn.com/abstract=4337344>
- Zeidan, R., & Shapir, O. M. (2017). Cash conversion cycle and value-enhancing operations: Theory and evidence for a free lunch. *Journal of Corporate Finance*, 45, 203-219. <https://ssrn.com/abstract=2941282>

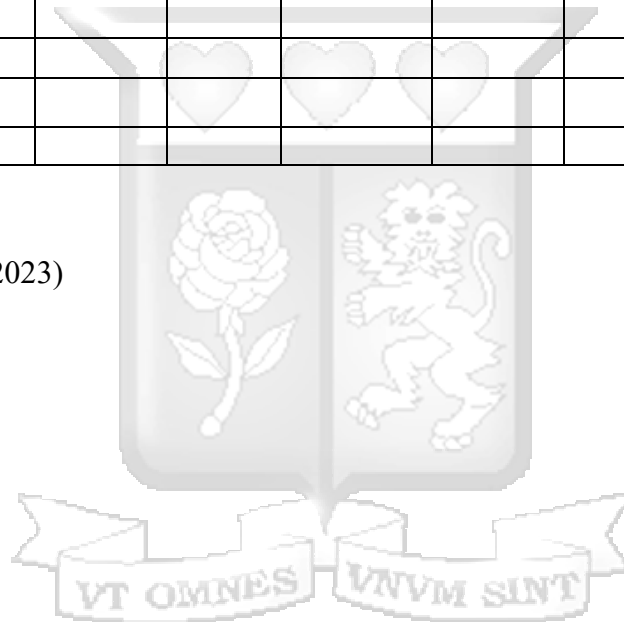


APPENDICES

Appendix I: Data Abstraction Tool

	Years				
Financials reports	2019	2020	2021	2022	2023
Number of Independent Directors					
Board Diversity					
Number of Board members					
Total assets					
Net profits					
Years of operation					
Credit Sales					
Credit Purchases					
Account payable					
Account receivable					
Avg. Inventory					

Source: Researcher (2023)



Appendix II: Work Plan

Activity	Nov. 2023				Dec. 2023				Jan. 2024				Feb. 2024			
	Week				Week				Week				Week			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Topic selection & approval	■															
Supervisors allocation		■														
Produce draft proposal			■	■	■	■										
Incorporate supervisors' reviews				■	■	■										
Proposal ready for presentation							■	■								
Incorporation of panel comments									■	■						
Data collection												■	■			
Data processing and analysis													■	■		
Review of draft by supervisor														■	■	
Incorporate supervisor comments															■	■
Submit project to Strathmore University library																■

Source: Researcher (2023)

Appendix III: Research Budget

Activity	Quantity	Unit Cost (Ksh.)	Total Cost (Ksh)
Proposal Writing			
Stationary			
Foolscap	4 reams	500.00	2000.00
Pen	2pkts	500.00	1000.00
Flash Disk	4GB	3500.00	3500.00
Spring	20 pieces	70.00	1,400.00
Typesetting	50 pages	50.00	2500.00
Printing	20 copies	250.00	5,000.00
Photocopying	20 copies	100.00	2,000.00
Binding (Loosely)	30	60.00	1,800.00
Transport	5 days	2,000.00	5,000.00
Subsistence	5 days	2,000.00	5,000.00
Total			29,200.00
Data Collection			
Typesetting	10 pages	50.00	500.00
Printing	10 pages	10.00	100.00
Photocopying		50.00	10,700.00
Subsistence	5 days	1000.00	5,000.00
Data analysis		30,000.00	20,000.00
Total			36,300.00
Thesis Preparation			
Typesetting	150 pages	50.00	7,500.00
Printing	150 pages	10.00	1,500.00
Binding	20 copies	50.00	1000.00
Subsistence	5 days	1000.00	5,000.00
Sub-Total			15,000.00
Total			80,500.00

Source: Researcher (2024).

Appendix IV: Target Population

1. Eaagads Limited
2. Kakuzi Limited
3. Kapchorua Tea Company Limited
4. Limuru Chai Company Limited
5. Sasini Tea and Coffee
6. Williamson Tea Kenya Limited
7. Car & General Kenya
8. Marshalls East Africa
9. Sameer Africa Limited
10. Barclays Bank of Kenya
11. CFC Stanbic Holdings
12. Diamond Trust Bank Group
13. Equity Group Holdings Limited
14. Housing Finance Company of Kenya
15. I&M Holdings Limited
16. Kenya Commercial Bank Group
17. National Bank of Kenya
18. NIC Bank Group
19. Standard Chartered of Kenya
20. Cooperative Bank of Kenya
21. Express Kenya Limited
22. Hutchings Biemer Limited
23. Kenya Airways
24. Longhorn Kenya Limited
25. Nation Media Group
26. Scangroup
27. Standard Group Limited
28. TPS Serena
29. Maduka ya Uchumi
30. Athi River Mining
31. Bamburi Cement Limited
37. Kenya Power and Lighting Company
38. Total Kenya Limited
39. Umeme
40. British-American Investments Company
41. CIC Insurance Group Limited
42. Liberty Kenya Holdings Limited
43. Jubilee Holdings Limited
44. Kenya Re-Insurance Corporation
45. Pan Africa Insurance Holdings Limited
46. Centum Investment Company Limited
47. Olympia Capital Holdings
48. TransCentury Investments
49. Nairobi Securities Exchange
50. A Baumann and Company
51. BOC Kenya
52. British American Tobacco
53. Carbacid Investments
54. East African Breweries
55. Eveready East Africa
56. Kenya Orchards Limited
57. Mumias sugar
58. Unga Group
59. Safaricom
60. Atlas Development & Support Services
61. Home Afrika
62. Flame Tree Group Holdings Ltd
63. Kurwitu Ventures



Appendix V: Letter from Strathmore University



22nd April 2024

Mr Otworì Clinton,
clinton.otworì@strathmore.edu

Dear Mr Otworì,

RE: Effects of Board and Firm Characteristics on Cash Conversion Cycle in Kenyan Listed Firms: Moderated by Inflation

This is to inform you that SU-ISERC has reviewed and **approved** your above SU-masters research proposal. Your application reference number is SU-ISERC2218/24. The approval period is from **22nd April 2024 to 21st April 2025**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC



Ole Sangale Rd, Madaraka Estate, PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu



Appendix VI: NACOSTI Permit



REPUBLIC OF KENYA
Ministry of Science, Technology and Innovation
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 654956



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Date of Issue: 24/April/2024

RESEARCH LICENSE



This is to Certify that Mr. Clinton Gathuma Oware of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: **EFFECTS OF BOARD AND FIRM CHARACTERISTICS ON CASH CONVERSION CYCLE IN KENYAN LISTED FIRMS; MODERATED BY INFLATION**, for the period ending : 24/April/2025.

License No: NACOSTIP/24/4863

Applicant Identification Number: 654956

Director General



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

