

**EFFECT OF WORKING CAPITAL MANAGEMENT ON  
DIVIDEND PAYOUT OF NON-FINANCIAL FIRMS LISTED AT  
THE NAIROBI SECURITIES EXCHANGE**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD  
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## DECLARATION


I, the undersigned, hereby swear that this is my own original work, and that it has not been submitted for review to any other organization or university but the University of Nairobi.

Signed:  \_\_\_\_\_ Date: 20/11/2022 \_\_\_\_\_

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

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## **DEDICATION**

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## **LIST OF ABBREVIATIONS**

<b>ADF</b>	Augmented Dickey Fuller
<b>ANOVA</b>	Analysis of Variance
<b>CBK</b>	Central Bank of Kenya
<b>CCC</b>	Cash Conversion Cycle
<b>CMA</b>	Capital Markets Authority
<b>DIO</b>	Days Inventory Outstanding
<b>DPR</b>	Dividend Payout Ratio
<b>DPS</b>	Dividend Per Share
<b>EPS</b>	Earnings Per Share
<b>FCF</b>	Free Cash Flow
<b>NSE</b>	Nairobi Securities Exchange
<b>NTC</b>	Net Trade Cycle
<b>OLS</b>	Ordinary Least Square
<b>ROA</b>	Return on Assets
<b>VIF</b>	Variance Inflation Factors
<b>WCM</b>	Working Capital Management

## ABSTRACT

Depending on how effectively disposable resources are managed and how cautious a firm is when it comes to resolving operational concerns, the skill of striking a balance between firm working capital and dividend payments frequently determines business success or failure. The unfavorable effects of both overinvesting and underinvesting in working capital have encouraged research on the most effective policy for managing working capital. Efficient WCM leads to availability of free cash flows which then act as a catalyst to dividend payout. The main intention of this study was to examine WCM impact on dividend payout of listed non-financial firms in Kenya. The Keynesian liquidity preference theory, the free cash flow theory and the transaction cost theory were adopted to anchor the study. A descriptive research design was utilized in this research. The target population was the 42 listed non-financial firms in Kenya. Secondary data was gotten from the CMA and specific listed non-financial firms annual financial statements for a 5year period (2017 to 2021). Upon collection of the data, inferential as well as descriptive statistics generated included frequencies and percentages and simple and multiple linear regression respectively. The regression results produced a 0.154 R square which implies that 15.4% of the changes in dividend pay-out among listed non-financial firms can be described by the six selected variables for this research. The overall model was found to be statistically significant as exhibited by a 0.000 p value that was below 0.05. The study further revealed that individually, DIO, DSO and DPO do not have a significant impact on dividend payout of non-financial firms listed at the NSE ( $\beta=0.081$ ,  $p=0.232$ ); ( $\beta=0.-101$ ,  $p=0.133$ ); ( $\beta=-0.026$ ,  $p=0.822$ ). Both firm size and profitability positively affected dividend payout as shown by ( $\beta=0.261$ ,  $p=0.000$ ) and ( $\beta=0.214$ ,  $p=0.000$ ) respectively. Financial leverage exhibited a negative and significant dividend payout influence as shown by ( $\beta=-0.202$ ,  $p=0.008$ ). The research recommends management of listed non-financial firms ought to focus on enhancing their asset base and their profitability as this will enhance dividend payout. The study further recommends the need to for listed non-financial firms to set debt limits as high debt levels might have a negative impact on dividend payout. The research recommends the necessity for further researchers to focus on other dividend payout determinants.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The literature on corporate finance has included discussions on a variety of topics, including dividend policy. Because of the significant impact it has on the decisions that firms and investors make regarding financing and investments, it is a core issue in finance. Working capital management (WCM) is an important issue that has gotten less attention in the literature about the variables that impact dividend distributions (Yakubu, Alhassan & Fuseini, 2017). Profits and dividends can be increased significantly if working capital is managed effectively (Beneish, 2017). In their contributions, Ahmed and Javad (2009) acknowledged a connection between a company's WCM and the amount of dividends it pays out. According to WCM, successful businesses have a surplus of cash after covering their fixed expenses, from which they may distribute dividends to their owners.

The Keynesian liquidity preference theory, the free cash flow theory and the transaction cost theory are the three primary theories that serve as the foundation for this research. According to Keynes (1936) liquidity preference theory, an efficient WCM would lead to more stable economic cycles, increasing profits and making it possible to increase dividend payments. When a company has a lot of free cash flow but no good investment prospects, according to Jensen's (1986) free cash flow theory, management is more likely to squander money on wasteful expenditure and duplicate overhead. Transaction cost theory by Bhattacharya (1979) discusses how the transaction costs are related to some decisions, in this case, WCM and their effect on dividend policy.

The non-financial firms that are listed on the NSE will be the primary focus of this research. This choice arises as non-financial institutions are not constrained in their ability to choose the liquidity structure that best suits their operations (Karimi, 2020). This context has also been chosen because some non-financial firms at the NSE have not been paying dividends and therefore offers a good context to investigate whether WCM can explain the tendency. Some non-financial firms like Home Africa ,Kenya Airways, Uchumi Supermarkets, Mumias Sugar Company, and Transcentury have experienced WCM issues as evidenced by huge debts to their creditors and suppliers (Ikunyua, 2020).

### **1.1.1 Working Capital Management**

As described by Adeniji (2008), working capital management is the process by which a firm allocates its liquidity to satisfy its operational needs on a day-to-day basis. Working capital is the gap between a bank or other financial institution's short-term assets and its short-term commitments. The term working capital refers to the money a company has on hand to use toward producing goods or offering services (Akinsulire, 2008). According to Finkler (2010), WCM is the efficient administration of a firm's short-term assets and liabilities. In the context of accounting, current assets and current liabilities refer to assets and obligations that may be used or converted to cash within a year.

The ability of an organization to perform its operational tasks is directly proportionate to the judgments it makes regarding the proper levels of both its current assets and its liabilities (Harris, 2005). Businesses that are thriving work hard to achieve the ideal combination of income and invested capital in their finances. Holding too little or too much inventory may prevent a company from fulfilling the requirements of its

customers in a satisfactory manner. This highlights the need of ensuring a sufficient level of working capital is available to keep profits where they need to be. These assertions show that WCM is crucial to business success and has a major influence on the effectiveness of operations both now and in the future (Akoto, Awunyo & Angwor, 2013).

In operationalization of WCM choices, the Cash Conversion Cycle (CCC) is often utilized. CCC refers to the time it takes to turn an investment in input resources into cash from credit sales, less the time it takes to collect payment for products or services sold. It is the point in the business cycle at when the firm's resources are committed to an activity (Deloof, 2013). According to the results of their liquidity analysis, businesses can be classified as either aggressive, which prioritizes working capital investment and financing policies with high risk and return, moderate, which prioritizes matching or cautious, with lower risk and return, or in between, which prioritizes a balance between the two extremes (Weinraub & Visscher, 2018). Aggressive enterprises often use working capital investment and financing strategies with a high risk/reward profile (Beneish, 2017). In this study, CCC metrics of Days Inventory Outstanding (DIO), Days Sales Outstanding (DSO), and Days Payable Outstanding (DPO) were used as measures of WCM.

### **1.1.2 Dividend Payout**

Fumey and Doku (2013) define dividend payout as the proportion of a company's profit distributed to common shareholders as dividends. Distribution of dividends may be periodic or ongoing. According to Brockington (2013), the dividend payout is the amount of money distributed as dividends to shareholders out of the company's net income. Dividend payout is the ratio of dividend per share (DPS) to earnings per

share (EPS). According to Petit (1972), a dividend payout is the distribution of a portion of a company's earnings to its shareholders. The ideal dividend payment permits the company to optimize both its present dividend payments and its future growth into an entity that will push up the stock price.

The majority of companies that pay dividends do so in the form of cash distributions (Al-Najjar, 2017). In order for a company to be eligible to pay this kind of dividend, the company must have sufficient cash on hand to pay dividends after they have been announced. If the corporation does not have enough cash on hand, it may borrow money in order to make the dividend payments. After dividends have been declared and paid, the overall assets and net worth of a commercial organization will, in the long term, drop as a result of the dividends that have been distributed. The ultimate effect of dividends is a reduction in the firm's reserve as well as cash accounts. When dividends are paid out to shareholders, the market price of the company's stock often declines over time (Bitrus, 2011).

When it comes to operationalization, dividend payout may be quantified in terms of the dividend yield, dividends cover, or payout ratio. All three of these metrics are interrelated. The proportion of a shareholder's overall return that is attributable to dividend payments alone is known as the dividend yield. The amount of a firm's dividend payment may be determined by taking the dividend paid out on each share and dividing that number by the profits paid out on each share. Indicative of the dividend payment's steadiness in the face of a drop in profits, dividend cover is determined by dividing the firm's EPS by the dividend paid per share. This calculation can be done to establish the dividend cover (Menamin, 2010). Dividend payout was calculated as a ratio of DPS to EPS in the current study.

### **1.1.3 Working Capital Management and Dividend Payout**

Myers' (1984) trade-off hypothesis suggests that in order for businesses to maximize profits, they must find a middle ground between the dividend payments benefits and the risks of illiquidity. Deterioration in a company's liquidity might be caused by the payment of dividends; hence, this argument points to a detrimental connection between the variables under investigation. It might be more detrimental to a company if they attempt to increase their earnings by decreasing their degree of liquidity (Shin & Soenen, 1998). The trade-off model clarifies how a company chooses the amount of cash on hand that is most suitable for its operations by analyzing the marginal costs and benefits associated with keeping that amount of money on hand.

Keynes (1936) formulated liquidity preference hypothesis. According to this school of thought, investors will demand a higher premium for investments with a longer time to maturity and will favor liquid over illiquid assets. This theory assumes that all other factors will remain the same. The convenience of retaining cash is referred to as liquidity. At any particular point in time, a person or company may hold onto money for a variety of reasons. Even if this theory does not directly address the link between WCM and dividend payouts, it is plausible to assume that a firm with adequate WCM is more likely to distribute a larger share of its earnings to shareholders (Bitrus, 2011).

According to Jensen's (1986) free cash flow theory, when there is a positive FCF, the agency conflict between shareholders and management becomes more severe. The issue arises due to the fact that there is no motivation for management to approach the capital markets in order to obtain money when the company has a cash surplus. In contrast to the restrictions imposed by capital providers if the funds had been raised on the capital market, the company's management is now free to make any spending

and investment decisions they see fit. According to this theory, there should be an inverse connection between WCM and dividend payout.

#### **1.1.4 Non-Financial Firms Listed at the Nairobi Securities Exchange**

The NSE is the regulatory body in Kenya for the securities market and is the only venue where Kenyan firms may be listed. Since its founding in 1954, this institution has expanded to become East and Central Africa's preeminent stock exchange. Shares (equity) and bonds (debt and leverage instruments) are the types of securities that are exchanged the most often. Both types of instruments fall under the category of financial instruments. The organization encourages both savings and investment by facilitating the connection between lenders and borrowers. Currently, the company has a total of sixty-three companies listed with it, and these companies are represented throughout a variety of business areas (NSE, 2021). Out of the 63, a total of 42 are in the non-financial sector and they will be the current research focus.

In terms of WCM amongst NSE listed non-financial firms, the firms have had WCM issues that led to statutory management, receivership, hostile takeovers, and government bailouts (Doan, 2020). Many Kenyan companies, including Kenya Airways, Mumias Sugar Company, Home Africa, Uchumi Supermarkets, and Transcentury, have been reporting losses year after year and they have owe huge debts to their creditors and suppliers. Studies are needed to establish whether WCM of non-financial listed businesses to account for these tendencies and whether it can be used to boost dividend payout (Ikunyua, 2020).

In regards to dividend payout, the majority of publicly traded firms in Kenya distribute dividends twice a year. There are no regulatory regulations that promote or compel businesses to use a certain split payment plan. However, dividend payout is



subject to several legal constraints, such as the prohibition on dividend payments made from the company's capital before liquidation has begun. According to a research by Karimi (2020), more than half of the companies that have a listing at the NSE have either eliminated dividends entirely for their shareholders or cut the amount of money that is paid out for each share that is owned. This number represents 35 of the companies and this is an indication that dividend payment has been an issue.

## **1.2 Research Problem**

Depending on how effectively disposable resources are managed and how cautious a firm is when it comes to resolving operational concerns, the skill of striking a balance between firm working capital and dividend payments frequently determines business success or failure (Mathuva, 2010). As a result of this, the majority of companies have focused a lot of their energy, time, and resources on identifying suboptimal operating levels. At these levels, investment quality is not harmed and financial resources are not being held in fixed assets for no good reason (Kieschnick et al., 2016). The unfavorable effects of both overinvesting and underinvesting in working capital have encouraged research on the most effective policy for managing working capital. An effective strategy for managing working capital enables businesses to cut their operating expenses to the absolute minimum while at the same time realizing significant gains in terms of their operational efficiency. Efficient WCM leads to availability of free cash flows which then act as a catalyst to dividend payout (Beneish, 2017).

Non-financial firms trading at the NSE have an important part to play in achieving the goals of their respective economies and fostering economic progress. The expansion of an economy will be stunted if it does not have a robust non-financial sector to

support it. Having enough liquidity is crucial for firms in the industry since it allows for cost savings and a more effective capital mix for investment opportunities. Firms will experience growth in benefits like these if they have optimal liquidity (Ndirangu, 2021). According to a research by Karimi (2020), more than half of the companies that have a listing have either eliminated dividends entirely for their shareholders or cut the amount of money that is paid out for each share that is owned. This number represents 35 of the companies. There is a great deal of information that is contradictory on the reasons why several companies that traded at an eight-year low in 2019 on the NSE chose not to declare dividends or award incentives to capital owners. The current study sought to establish if WCM can explain the dividend payout trend among NSE listed non-financial firms.

The empirical research conducted throughout the world has shown conflicting findings on WCM and dividend payout. Using London Stock Exchange listed firms, Xu, Gan, Li, and Wang (2021) investigate the influences of a company's profits as well as its working capital on the dividend distribution. The findings indicate that there is a link in the form of an inverted U-shape between a company's working capital and the dividends it pays out. Yakubu (2021) investigates how the dividend policies of publicly listed Ghana non-financial firms are affected by the efficiency with which their working capital is managed. The data shows a positive link between WCM and dividend payouts, with inventory days outstanding having a major effect on payouts. Bhatia, Sivasankaran, Banerjee, and Chattopadhyay (2021) investigate the influence that working capital efficiency has on dividend payouts made by listed non-financial companies in India. Results indicate a significant negative correlation between WCM efficiency and dividend payout ratios across the companies in the sample.

Locally, Ikunyua (2020) conducted research on a local level to investigate how WCM affects the dividend distribution of NSE-listed manufacturing companies. In the conclusion, the study concluded that dividend distribution among NSE-listed manufacturing businesses was not significantly affected by WCM as measured by the current ratio. Karimi (2020) focused on the effect of WCM on dividend distribution among NSE-listed firms. The findings indicated that WCM possessed positive effect, though not statistically significant, on dividend payout. Akenga and Olang (2017) made an effort to determine the impact that a company's working capital had on the amount of dividends that were paid out by companies that were listed on the NSE. The results of the study demonstrated that efficient cash management positively affects dividend payments. It was also observed that the management of inventories and accounts receivable had a beneficial impact on the choices about dividend payouts.

Although previous research has looked into the WCM impact on dividend payout, there are conceptual, contextual, as well as methodological gaps. Conceptually, it is possible that the disparities in results are due to the fact that WCM and dividend payout have each been conceptually operationalized in a unique manner by the prior researchers. Contextually, existing research on WCM and dividend payout has, for the most part, been conducted in developed markets, such as those in the western hemisphere and the Asia-Pacific region. Due to their different social and economic environments, emerging nations' findings may not be generalized to developing ones. In terms of methodology, the majority of the earlier research only took into account a small number of companies (usually fewer than 15), which may not be enough to evaluate how WCM influences dividend payout. Based on these gaps and the desire of businesses to increase their dividend payout, this research pursued to address the

following question: how does the management of working capital affect the dividend payout of firms traded on the Nairobi Securities Exchange?

### **1.3 Research Objective**

The objective of this research was to determine the effect of working capital management on dividend payout of firms listed at the Nairobi Securities Exchange.

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

The conclusions will aid investors as well as practitioners comprehend the link between the two variables. The findings will also help investors and practitioners better grasp the connection between a well-rounded management team, solid operations, vigilant WCM management, and extensive public confidence in the firm and their ability to maximize dividend distribution.

Governments, stock exchanges, central banks, and economic agencies are all examples of policymakers; they might utilize the research conclusions to inform their decisions on WCM and dividend distribution. These institutions include: It's possible that the authorities that make policy may utilize the study's suggestions as a basis for developing efficient WCM methods to increase dividend payment.

In conclusion, the research will provide novel insights to ongoing theoretical discussions of the tradeoff theory, the Keynesian liquidity preference theory, and the free cash flow theory. The findings of this study are significant because they contribute to the existing empirical literature on WCM and dividend payment. On the basis of the recommendations and proposals made for more study, other investigations could potentially be conducted.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The theoretical underpinnings of WCM and dividend payment are explored in depth in this chapter. In addition, it summarizes prior empirical research, points out knowledge gaps, and concludes with a conceptual framework and hypotheses that propose a likely causal link between the investigated variables.

### **2.2 Theoretical Framework**

This section covers the theories upon which the research of working capital management and dividend payout is based. The research examined Keynesian liquidity preference theory, free cash flow theory and transaction cost theory.

#### **2.2.1 Keynesian Liquidity Preference Theory**

The Keynesian liquidity preference theory, which Keynes (1936) developed, is widely regarded as the theoretical cornerstone upon which WCM rests. Because investors dislike being in possession of assets that are difficult to sell quickly, Keynes postulated that they would demand a higher return on investments that had a longer maturity period. He maintains that this preference will exist even if all other conditions remain the same. The convenience of retaining cash is referred to as liquidity. At any particular point in time, a person or company may hold onto money for a variety of reasons (Bitrus, 2011). According to the hypothesis, companies keep cash on hand or inventory in order to satisfy their transactional, speculative, precautionary, and compensatory reasons. The necessity of the company to have cash or money on hand in order to satisfy ongoing transactions and commercial exchanges is the driving force behind the transaction motivation. Cash on hand is essential for businesses, as it allows them to meet their immediate financial obligations and pay for

things like transportation, labor, and other essentials. Due to the incentive of safety, companies must have cash on hand as insurance against emergencies. Any given company will put some money away in order to weather difficult times or capitalize on unexpected business opportunities. The purpose of keeping assets in liquid form for speculative purposes by businesses, with the expectation of profiting from future changes in interest rates or bond prices, is known as the speculative motivation (Pattiruhu & Paais, 2020).

Keynes's liquidity preference theory has been subjected to a significant amount of criticism for insinuating that the interest rate will be greater when the desire for liquidity is higher, and that it will be lower when the demand for liquidity is lower. During times of economic downturn, consumers have a great desire for liquidity, while interest rates are at exceptionally low levels. In times of inflation, consumers have a low preference for liquid assets, despite the fact that interest rates are relatively high. These empirical findings contradict Keynes's theory. This is due to the fact that Keynes did not take into consideration different income levels. As per Gill et al., (2010) contemporary determinate theory is able to provide a satisfactory explanation for this occurrence. In addition, Keynes operates on the postulation that the only two options available are illiquid bonds or liquid cash. As a result, we might refer to this theory as a "all or nothing" hypothesis. In point of fact, there are many different kinds of investable assets, each of which has a different level of liquidity (Stewart, 2011).

The Keynesian theory of liquidity preference is appropriate to the current research as it relates liquidity with ability of firms to pay dividends. Managers of publicly listed corporations are obligated to safeguard sufficient working capital to allow the firm to achieve its main objective of increasing shareholder value. In any case, it is

reasonable to assume that dividend payments will be made by corporations when they have achieved the target level of WCM. Yet, it is possible to have too much cash on hand, and that might lead to lost investment opportunities. For this reason, firms should work to minimize both their liquidity costs and their illiquidity premiums. In order to maximize profits, businesses should practice working capital management.

### **2.2.2 Free Cash Flow Theory**

Jensen (1986) developed free cash flow theory where FCF was described as net cash flow less the requirements of projects having a positive net present value. Jensen is credited with creating the notion of free cash flow. According to Jensen (1986), a company's agency conflict with its shareholders is intensified when it generates positive free cash flow. The problem arises due to the fact that when a business has an excess of cash on hand, there is no need for the management of that business to utilize the capital markets in order to obtain further money. In contrast to the restrictions imposed by capital providers if the funds had been raised on the capital market, the company's management is now free to make any spending and investment decisions they see fit.

The free cash flow hypothesis has its critiques who believe it encourages short-term thinking by preventing investments that might result in long-term profits (Cornett, Guo, Khaksari, & Tehranian, 2010). If organizations' development possibilities are constrained and the surplus cash cannot be spent safely elsewhere, shareholders would rather have it returned to them via share buyback plans or dividends. Shareholders are concerned that the growth opportunities for the firms may be limited. On the other side, management would fritter away the spare cash on investments that did not produce a return, on administrative redundancy, and on benefits for management. The

free cash flow (FCF) hypothesis states that when companies generate large amounts of FCF but lack access to attractive investment opportunities, the management of such companies would likely misuse the FCF, driving up agency costs (Rochmah & Ardianto, 2020).

The FCF theory is pertinent to the variables of the current research as it holds that when there is surplus FCF, managers' self-interest leads to wastefulness and inefficiency at work. This study aims to investigate this phenomenon. According to this concept, free cash flow has an influence on a company's profitability because it raises agency costs inside the business. A decrease in the company's profitability will result in a reduction in dividends. This suggests a negative relationship between liquidity and dividend payments, as predicted by the hypothesis.

### **2.2.3 Transaction Cost Theory**

The Bhattacharya's (1979) model defines transaction costs as costs incurred when external financing sources are used. Dividends are however perceived as beneficial since their transaction costs are associated with the sale of consumable stocks. Dividend policy ratio affects earnings regardless of the additional transaction associated with the payment or lack of dividend payments. Firms incur significant costs in the distribution of dividends whereas investors incur costs in the collection and reinvestment of the same payments. Both firms and investors however, incur costs during the payments of dividends, since firms have to increase their external financing sources so as to meet their investment needs.

Miller and Rock (1985) contend dividends also have an impact on firm value if the dividend policy ratio influences the investment decisions of the management. Dividend payments often exhaust the internal funds of an organization and raise its



external funds which could make the firm to forgo positive net present value. They also argue that the dividends cost often arises from stock distortions meant for the purposes of consumption. Fama and French (2012) noted that a continuous decline in dividends' benefits may increase the chances use of mutual funds to hold stocks. The transaction costs attributed to the sale of stocks is reduced by mutual holdings thus leading to the attainment of the firms' investment decisions and liquidity needs. Transaction costs are inclusive of the firms' floatation costs for the acquisition of extra external finances including management time, administration costs and legal expenses. The existing shareholders often experience dilution of control when the dividends are paid by the firm so as to raise additional external sources of finance (Fama & French, 2012).

According to Rozeff (1982) dividends are only paid when they do not lead to shortage of internal funds needed for investments. He suggested that firms that greatly depend on external finance sources maximize shareholder wealth through the adoption of low payout policies. Leverage, volatility and growth potential are the main factors that led to high reliance on external sources of funds. High leverage levels mean high fixed costs which are to be incurred by the firm. A firm is said to have a growth potential if it is surrounded by good investment opportunities which require funding. The volatility of earnings also implies that there is higher dependency in external sources of finance due to less certainty regarding the anticipated revenues. This means that, highly risky growth and leveraged firms need to adopt conservative payout policies. The theory is linked to the research since it deliberates how the transaction costs are related to some decisions, in this case, WCM and their effect on dividend payments.

## **2.3 Determinants of Dividend Payout**

There are a variety of factors that might influence how much dividends a company pays out. These criteria are useful across a variety of different economic subsectors. Management of working capital, financial leverage, profitability, business size, ownership structure, regulatory limits, and macroeconomic variables are among the factors that fall under this category.

### **2.3.1 Working Capital Management**

Investors should be aware that the corporation treats dividends as a cash outflow that must be recorded. Even if a firm could have accumulated sufficient profits to declare dividends, the cash that it have available at any one time might not be sufficient to cover the cost of those payments. When determining whether or not to pay dividends, it is consequently essential to take into account the financial position of the company; a company's capacity to do so grows along with the company's total liquidity and cash position (Pandey, 2010).

It is common for dividends to be more likely to be paid by long-established companies since they have more cash on hand. Because most of its money are not kept in working capital, a business like this has very less investment opportunities because this ensures that its cash position is always solid. On the other side, rising companies struggle with the issue of not having enough money. When making a decision on whether or not to pay dividends, management must take into account how doing so would affect the liquidity of the company. If management believes that paying dividends may negatively affect the company's liquidity, they may decide to retain profits instead. This would be consistent with a cautious payment plan (Pandey, 2010).

### **2.3.2 Financial Leverage**

Jensen (1986) and Stulz (2000) argue that financial leverage is critical for keeping an eye on management's actions, cutting down on expenses caused by agency friction, and increasing the company's bottom line. Using debt, as proposed by Jensen (1986), may lessen shareholders' and managers' need to rely on dividends for resolving tensions arising from agency conflicts. This is one of the hypotheses that he presents in his book. As a result, the free cashflow agency theory postulates that there will be an inverse link between dividends and debt.

In addition, protective covenants that restrict the amount that may be paid out are often included in agreements. Long-term debt divided by equity book value is one definition of financial leverage proposed by Fauzi and Locke (2012). This term is relevant to a business's financial standing. Therefore, the research conclusions provide support to the hypothesis that leveraged financial structures are associated with lower dividend payouts.

### **2.3.3 Firm Profitability**

Indicators of a company's capacity to distribute profits to shareholders are widely agreed upon to be profitability and growth. For Lintner (1956), a company's dividend distribution history is a function of both past dividend payments and the current year's earnings. According to Baker and Powell (2000), dividends are substantially influenced by the amount of expected future profits.

According to Gitman and Pruitt (2013), the capacity of a corporation to pay dividends is heavily influenced by both the earnings of the current year and those of the years prior to that. Dividends are mostly determined by the amount of future earnings in an industry, as revealed by Baker and Powell (2000) in their study of businesses trading

on the New York Stock Exchange. This finding is in line with the theory put forward by Lintner, who argues that companies whose profits are less subject to periodic fluctuations would ultimately be more successful (Abala, 2013). The results imply that cyclical earnings have a major role in dividend decisions.

#### **2.3.4 Firm Size**

According to Eriotis's (2005) research, Greek corporations pay out dividends yearly based on a target payout ratio that considers both the company's size and the amount of revenues retained. Consideration of the company's size provides some insight into the dividend payout ratio (Lloyd, Jahera & Page, 1985). According to the findings of this research, bigger companies are seen as having a better level of financial maturity, which in turn grants them more access to money available via the capital markets. Because of this, they are less reliant on the cash produced domestically, and as a result, the ratio of dividend distributions is increased. Therefore, a company's dividend payout ratio tends to increase in tandem with its size.

Large corporations often have a longer track record and bigger financial resources, making them better able to provide shareholders with dividends. The greater ease of access to capital that huge corporations have over their smaller rivals is largely to blame. Sawicki (2005) said that monitoring the performance of major companies via the distribution of dividends was something that might be done. The high amount of information asymmetry that exists in big companies is caused by the separation of ownership that exists in such companies, and thus enhances the incapacity of shareholders to monitor the operations of the management of those companies. Since a boom in dividends promoted debt financing, which resulted in surveillance due to

the existence of debenture holders and trade payables, dividend payment is the correct course of action.

## **2.4 Empirical Review**

The purpose, methods, and conclusions of studies conducted both locally and abroad that indicate a connection between WCM and dividend payout are examined.

### **2.4.1 Global Studies**

Yakubu (2021) explores the ways in which WCM influences the dividend policy of non-financial businesses that are listed on public stock markets in Ghana. Research is conducted on the link between dividend policy and cash conversion cycle (CCC), days inventory outstanding (DIO), profitability, and the development of the company. It was found that dividend policy is significantly influenced by DIO, and that WCM (as measured by cash conversion cycle and DIO) is favorably associated with dividend policy. Both of these findings were made possible by the discovery that DIO possess a substantial impact on dividend policy. For the purpose of this inquiry, ordinary least square (OLS) was utilized. The findings also revealed a positive connection between the control variables of profitability and business growth and dividend policy, although a connection that was not statistically significant. The study's findings suggest that firms' dividend policy decisions are affected by WCM, as assessed by days inventory outstanding (DIO). Since OLS was used, a known methodological flaw emerged when it came time to deal with outlying cases. One would have been better served by a fixed or random effect.

Bhatia et al. (2021) investigate the link between the dividend payout ratio of a firm and the length of time it takes for its net trade cycle. The Tobit regression model was employed in the research to analyze the data obtained from the sample firms. The

research used secondary data from the Bombay Stock Exchange, collected on 150 firms from 2012-2018. According to the results, the NTC is correlated with declining performance across sample businesses' DPRs. Conversely, it was found that NTC's beta coefficient is fairly low, suggesting that in the context of the Indian economy, a lower NTC may not necessarily result in a larger DPR for firms. Due to the fact that this research was carried out in India, its results cannot be extrapolated to reflect any other settings. As a result, this study displays a contextual gap.

Using London Stock Exchange listed firms sample between the years 1991 and 2015, Xu et al. (2021) investigate the link between a company's profitability and the amount of working capital it maintains as well as the amount of dividends it pays out. The conclusions specify that unadjusted profits possess positive and substantial impact on dividend payments made by companies, however dividend-adjusted earnings do not have a significant affect on dividend payments made by these companies. This finding contradicts the hypothesis that dividend-adjusted earnings would have such an influence. In addition, they discover that there is a link in the form of an inverted U between the amount of working capital and the dividend distribution. These results give more cohesive evidence between the profits and dividend payment, and they underline the need of taking into consideration working capital as a driver when creating a strategy for the dividend distribution of a corporation. Because the emphasis of this research was on working capital as defined by current ratio, it does not address the relationship between WCM and the amount of dividends paid out. This leaves a conceptual vacuum.

Gill, Mand, Obradovich, and Mathur (2019) investigate how dividend choices are affected by an organization's ability to effectively manage its working capital. The

findings imply that the decision-making process regarding the distribution of dividends by Indian manufacturing companies may be influenced by the management of working capital. The study's results suggest that cash on hand plays a key role in determining whether or not Indian producing businesses pay dividends. Companies in the Indian production industry with larger cash reserves than those that do not distribute profits to shareholders fall into this category. This study provides a substantial addition to the corpus of research that has already been done on the factors that impact the decisions that businesses make about the distribution of dividends. The study focused on only one measure of WCM. Further, the study was based on production firms and therefore results cannot be generalized to represent firms in other sectors.

Yakubu (2019) looked at the effect that WCM has on the dividend policies of Ghanaian firms that are not in the banking sector and are listed on public exchanges. In particular, the research looked at how factors such as a firm's growth rate, profitability and CCC affect the dividend policy that the company chooses to implement (CCC). The findings demonstrated a positive correlation between WCM and dividend policy in terms of DIO and CCC, with DIO possessing a considerable influence on dividend policy. The data from the research were examined using the OLS regression approach. In addition, the data showed that growth and profitability of the firm, which served as controls, were positively related to dividend policy, even if this relationship was not statistically significant. Based on the findings, it was determined that WCM in connection to DIO is a vital firm factor in dividend policy decisions. This research was carried out in Ghana, which has business practices and a social as well as economic environment that are distinct from those of listed enterprises in Kenya, which are the primary subject of the present investigation.

### **2.4.2 Local Studies**

Karimi (2020) was interested in studying how WCM affects the dividends paid by NSE-listed firms. All 63 companies currently trading on the NSE were included in the analysis. Every year from January 2015 through December 2019, secondary data were gathered. A multiple linear regression analysis was performed in order to investigate the dynamics of the connections that exist between the variables. The research found that factors such as business size and profitability had a favorable and considerable impact on the amount of dividends paid out. Both WCM and leverage produced favorable results for this investigation, although those results lacked statistical significance. As per to the conclusions of the research, WCM was conceived as just current ratio, leaving other key measurements such as CCC out of the equation.

Ikunyua (2020) centered their research on determining whether or not WCM had an effect on the dividend distribution of NSE-listed manufacturing companies. The sample comprised one representative from each of the nine manufacturing companies that are listed on the NSE. The collection of secondary data got underway in January 2015 and will go until December 2019 at the earliest. In the research, the interrelationships between the variables were investigated using a method known as descriptive cross-sectional analysis. Dividend payout ratios benefit from an organization's size, independent of the level of debt financing it uses, as shown by the results of recent research. In this particular research, the WCM and profitability created effects that were not statistically significant. The research was limited to manufacturing companies, thus it doesn't take into account any other enterprises that are included.



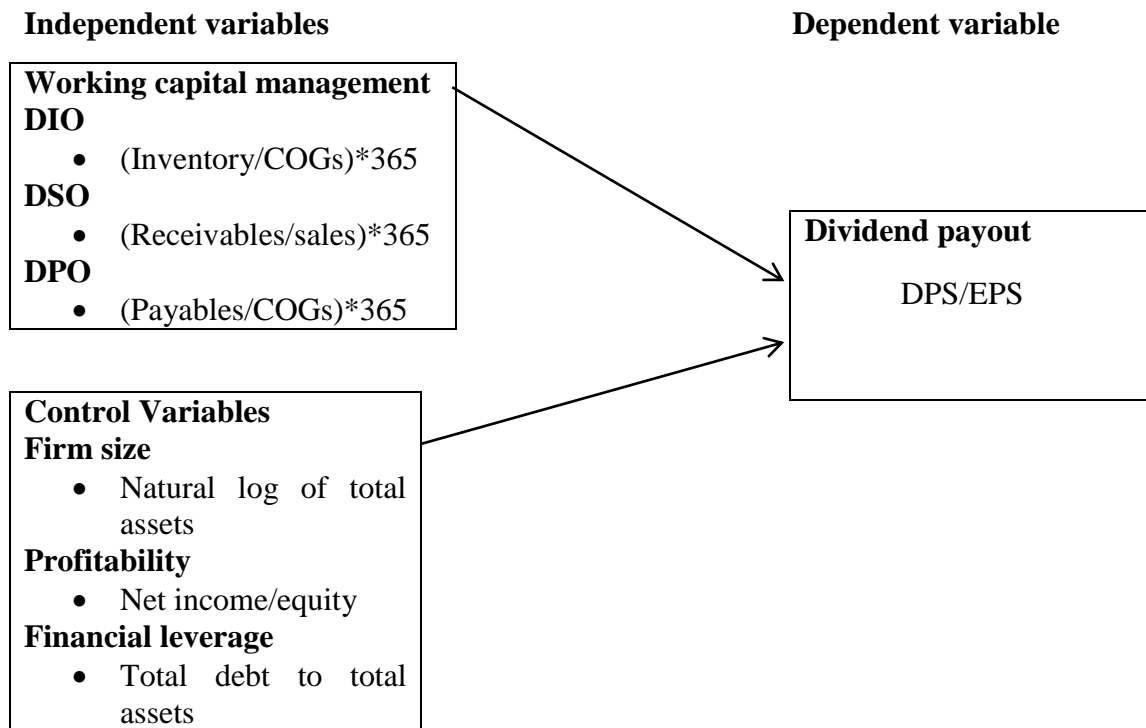
Dividend policies of banks listed on the Nairobi Securities Exchange between 2013 and 2017 were investigated by Komora (2018) to assess the effect of stock liquidity on such policies. Dividend payout ratio and stock turnover rate were utilized as surrogates for stock liquidity and dividend distribution policy, respectively. Firm leverage and profitability, were included as control variables. Using a descriptive methodology, we extracted and analyzed data from the CMA and NSE, and our analysis revealed that the stock turnover rate, our predictor variable, had no effect on our dividend policy, our outcome variable. Results from this study reveal that it is not feasible to predict the dividend distribution policy of banks trading on the NSE by analyzing the liquidity of stocks alone. Because the research concentrated on stock liquidity rather than WCM, it creates a vacuum in our understanding of the relationship between the two.

Akenga and Olang (2017) made an effort to determine the impact that a company's working capital had on the amount of dividends that were paid out by companies that were listed on the NSE. Publicly accessible company financial records and annual reports were used as secondary sources for this investigation. The study's findings demonstrated that efficient financial management positively affects dividend payments. Observations were also made on the positive effect that effective inventory and accounts receivable management had on the decisions regarding dividend distributions. The study's results convinced its authors that companies should implement the study's suggestions to boost dividend payments to shareholders. These include ensuring that inventory is properly managed, implementing policies to ensure that creditors pay their bills on time, and properly managing cash flow. Due to the fact that some parts of WCM, such as payables administration, were not taken into consideration in this research, a conceptual gap has been shown.

Olang, Akenga, and Mwangi (2015) pursued to determine the effect that liquidity has on dividend payments of NSE listed firms. They were interested in determining the extent to which factors like as liquidity, profitability, working capital, and cash flow influence the distribution of dividends. They based their analysis on data collected between the years 2008 and 2012. Descriptive as well as inferential statistics were utilized. According to the findings of the research, the profitability of a firm has a beneficial influence on the dividend payments that are made to shareholders. It was discovered that a company's earnings were a more significant factor in determining dividend payments than either its cash flow or its working capital. In addition to this, they observed that greater liquidity had a beneficial influence on dividend distributions. Because determining the influence of WCM on the dividend payment of businesses was not the objective of this particular piece of study, those results should not be considered definitive.

## **2.5 Conceptual Framework**

Working capital management, as measured by Days Inventory Outstanding (DIO), Days Sales Outstanding (DSO), and Days Payable Outstanding, served as the investigation's independent variable (DPO). Profitability, company size, and leverage made up the control variables. The amount of dividends paid out served as the dependent variable, which was determined by the DPS to EPS ratio



**Figure 2.1: Conceptual Model**

**Source: Researcher (2022)**

## **2.6 Literature Review Summary**

Theoretical relationships between WCM and dividend payment have been modeled in a variety of ways. The free cash flow theory, the trade-off theory, and the Keynesian liquidity preference theory are all covered. This segment too covers the primary factors of dividend payout. On WCM and dividend payout, both local and foreign researches have been conducted. In this segment, the results linked to them have been described. Simply the fact that earlier researchers had achieved some degree of consensus was sufficient basis for doing more study. This void was exploited in the recently conducted research.

The preceding section's empirical experiments indicated the existence presence of conceptual, methodological, as well as contextual gaps. Differences in the operationalization of WCM revealed conceptual gaps. Methodological shortcomings

in empirical studies were exposed by the lack of agreement on standard research practices. Variations in study settings exposed a number of contextual gaps, which were uncovered during an examination of empirical studies. Most of the empirical research on this problem has been done in the developed world, and local studies have not focused on non-financial enterprises that are traded on the NSE. These discrepancies suggest that further research is needed into WCM and the connections between dividend payout, and they also show that there is no empirical consensus on these hypothesized relationships. However, these gaps have also highlighted that there is a need for more research. The goal of the research was to make a input in this area.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter outlines the methods that were used to determine whether and how WCM affects the dividend policy of non-financial firms listed on the NSE. There is a strong focus on research methodology, data collection, and statistical analysis.

### **3.2 Research Design**

A descriptive approach was used for this investigation. Examining the relationship that exists between WCM and dividend payment was the focus of this descriptive study's main objective. Given that the researcher was primarily interested in the phenomenon's fundamental characteristics, this approach was appropriate (Khan, 2008). It too was effective for describing the phenomena interconnections. This design too denoted the variables precisely and legitimately, yielding sufficient data to answer the research objectives (Cooper & Schindler, 2014).

### **3.3 Population**

A population is comprised of all of the observations that have been gathered from a collection of interesting objects that have been detailed in a research (Burns & Burns, 2008). The 42 non-financial companies that were listed on the NSE as of December 31st, 2021 made up the research population for this study (Appendix II). Census approach was utilized due to the population small size.

### **3.4 Data Collection**

Annual reported financials of non-financial businesses listed on the NSE between 2017 and 2021 were collected through publically available sources and entered into data collecting forms as the only source of information for this study. Specific data

such as DPS, EPS, total assets, total debt, net income, equity, inventory, cost of goods sold, total sales, receivables, and payables are some of the items that were gathered.

### 3.5 Data Analysis

Stata 16 was used to do an analysis on the data collected. Charts and tables were used to quantitatively display the results. Together, the gathered descriptive statistics and the standard deviation served as the basis for measurements of central tendency and dispersion for each variable. Both correlation and regression played a role in the construction of inferential statistics. A panel regression linearly established the link dependent and independent variables.

#### 3.6.1 Diagnostic Tests

Table 3.1 offers diagnostic tests performed

**Table 3.1: Diagnostic Tests**

<b>Assumption</b>	<b>Description</b>	<b>Test</b>	<b>Interpretation</b>	<b>Treatment</b>
Normality	To verify normal distribution, the test is conducted	Shapiro–Wilk test	If p values are above 0.05, the variables are normally distributed	application of square roots or logs to non-normality
Multicollinearity	The phenomenon known as multicollinearity occurs when there is a connection between many variables, which then leads to the standard errors distorting the regression analysis.	VIF Test	Multicollinearity exist where the $VIF > 10$	Eliminate highly correlated variables.
Heteroscedasticity	to determine whether the model's or the errors' variance is different for each observation	Breusch–Pagan test	Heteroscedasticity exist where the p-value $p < 0.05$ )	Use Natural log of variables

Autocorrelation	To determine the value of a single variable by considering other variables that are connected to it.	Breusch-Godfrey test.	If p-values are lower than 0.05, autocorrelation is present.	Hildreth-Lu Procedure
Stationarity test	In order to evaluate whether or not a time series variable has a unit root and whether or not it is stationary	ADF test	If p values are below 0.05, unit roots exist.	Use Natural log of variables

### 3.6.2 Analytical Model

The equation that is shown below was relevant:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \varepsilon_{it}$$

Where:  $Y_{it}$  = Dividend payout measured as the ratio of DPS to EPS

$\beta_0$  = y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$  = are the regression coefficients

$X_{1it}$  = DIO measured as  $(\text{Inventory}/\text{COGs}) * 365$

$X_{2it}$  = DSO measured as  $(\text{Receivables}/\text{sales}) * 365$

$X_{3it}$  = DPO measured as  $(\text{Payables}/\text{COGs}) * 365$

$X_{4it}$  = Firm size as measured by total assets natural logarithm

$X_{5it}$  = Profitability as measured by the ratio of net income to equity

$X_{6it}$  = Financial leverage measured as ratio of total debt to total assets

$\varepsilon$  = error term

### 3.6.3 Tests of Significance

The relevance of the overall model as well as the variable was established via the use of parametric tests. To determine whether the model was useful, the F-test was used but to determine if any given variable is statistically significant, the t-test was used.

## CHAPTER FOUR: DATA ANALYSIS RESULTS AND FINDINGS

### 4.1 Introduction

This chapter presents descriptive statistics and the results and interpretations of various tests namely; test of normality, Multicollinearity, heteroskedasticity tests, autocorrelation and stationarity test. The chapter also presents the results of Pearson correlation and regression analysis.

### 4.2 Descriptive Statistics

This segment presents the descriptive findings from the collected data. The descriptive results include mean and standard deviation for each of the study variables. The analyzed data was obtained from CMA reports and individual listed non-financial firms' annual statements for 5 years duration (2017 to 2022). The number of observations is 210 (42\*5) as 42 listed non-financial firms provided complete data for the 5 year period. The outcomes are displayed in Table 4.1.

**Table 4.1: Descriptive Results**

	N	Minimum	Maximum	Mean	Std. Deviation
DPR (Ratio)	210	.0000	2.5743	.181872	.3149907
DIO (Days)	210	2.5000	252.5500	78.343000	43.7217852
DSO (Days)	210	14.9000	244.3500	61.556381	35.0408034
DPO (Days)	210	17.6700	641.0000	156.205571	153.3968111
Profitability (Ratio)	210	-1.7648	.7202	.000503	.1773521
Firm size (Log)	210	7.6941	11.6166	9.763046	.9035578
Dividend payout (Ratio)	210	.0160	11.6480	2.836871	2.2775900
Financial leverage (Ratio)	210	.0246	1.4193	.483801	.2488244
Valid N (listwise)	210				

**Source: Research Findings (2022)**



### **4.3 Diagnostic Tests**

As rationalised in chapter three, the researcher performed diagnostic tests in order to make sure all assumptions of Classic Linear Regression Model (CLRM) are not violated and to acquire the appropriate models to examine in the consequence that the CLRM hypotheses are infringed. Consequently, prior to carrying out the processing of regression model pre as well as post approximation analyses were carried out. The pre- approximation test performed in such scenario existed in the multicollinearity test and unit root tests while the post estimation tests are normality test, test for heteroskedasticity and test for autocorrelation. The research attained the analysis to refrain from factitious regression results.

#### **4.3.1 Normality Test**

The normality of data can be tested using a variety of methods. The most commonly employed tests include the Shapiro–Wilk test, Kolmogorov–Smirnov test, skewness, kurtosis, histogram, P–P Plot, box plot, Q–Q Plot, mean and standard deviation. The most extensively used normality tests are the Kolmogorov–Smirnov test and the Shapiro–Wilk test. The Shapiro–Wilk test is good for small sample sizes ( $n < 50$  samples), while it is possible to use it on more extensive samples selections, whereas the Kolmogorov–Smirnov test is good for  $n > 50$  samples. As a result, the study used the Kolmogorov–Smirnov test as the numerical method of determining normality. In both tests outlined above, the null hypothesis says that information is obtained from a population that is normally distributed. The null hypothesis will be rejected whenever P-value is below 0.05, and the data are said to be not normally distributed. If any violation of the assumption of normality was detected, necessary correction measures were applied.

**Table 4.2: Test for Normality**

	<b>Kolmogorov-Smirnov</b>	<b>P-value</b>
DPR	3.591	0.207
DIO	6.305	0.303
DSO	4.429	0.405
DPO	2.764	0.416
Firm size	3.154	0.328
Profitability	4.240	0.401
Leverage	4.146	0.302

**Source: Research Findings (2022)**

From Table 4.2 results, all the study variables have a p value exceeding 0.05 and therefore were normal distribution.

#### **4.3.2 Multicollinearity Test**

Multicollinearity occurs when the independent variables in a regression model are significantly linked. Multicollinearity was assessed using the VIF and tolerance indices. Whenever VIF value is higher than ten and the tolerance score is below 0.2, multicollinearity is present, and the assumption is broken (Sheather, 2009). The VIF values are less than 10, indicating no problem with multicollinearity.

**Table 4.3: Multicollinearity**

<b>Variable</b>	<b>Collinearity Statistics</b>	
	<b>Tolerance</b>	<b>VIF</b>
DIO	0.587	1.704
DSO	0.782	1.279
DPO	0.535	1.869
Firm size	0.601	1.664
Profitability	0.598	1.672
Leverage	0.621	1.610

**Source: Research Findings (2022)**

### 4.3.3 Heteroskedasticity Test

The residual variance from the model must be constant and unrelated to the independent variable in linear regression models calculated using the OLS method(s). Homoskedasticity refers to constant variance, whereas heteroscedasticity refers to non-constant variance (Field, 2009). The study used the Breusch-Pagan/Cook-Weisberg test to check if the variation was heteroskedastic. The null hypothesis implies constant variance, indicating that the data is homoscedastic (Field, 2009). The outcomes are as depicted in Table 4.4.

**Table 4.4: Heteroskedasticity Results**

<b>Breusch-Pagan / Cook-Weisberg test for heteroscedasticity</b>	
chi2(1)	= 0.5934
Prob > chi2	= 0.3482

**Source: Research Findings (2022)**

Table 4.4 reveals that the null hypothesis was not rejected since the p-value was 0.3482, which was statistically significant ( $p < 0.05$ ). As a result, the dataset had homoskedastic variances. Since the P-values of Breusch-Pagan's test for homogeneity of variances were above 0.05. Thus the test confirmed homogeneity of variance. The data can therefore be used to conduct panel regression analysis.

### 4.3.4 Autocorrelation Test

Serial correlation, also known as autocorrelation, makes the standard errors of coefficients appear to be less than in linear panel data models, resulting in higher R-squared and erroneous hypothesis testing. Durbin-Watson test was utilized to test autocorrelation. Regression variables error terms are not correlated if Durbin-Watson

test is equivalent to 2 (i.e. between 1 and 3). The nearer the figure to 2 is; the better. The outcomes are presented in Table 4.5.

**Table 4.5: Test of Autocorrelation**

<b>Durbin Watson Statistic</b>
2.037

**Source: Research Findings (2022)**

The outcomes in Table 4.5 indicates Durbin-Watson statistic to be 2.136. Given that the Durbin-Watson value was near to 2, it is implied that the error terms of the regression variables are uncorrelated.

#### **4.3.5 Stationarity Test**

The research variables were subjected to a panel data unit-root test to establish if the data was stationary. The unit root test was Levin-Lin Chu unit root test. At a standard statistical significance level of 5%, the test was compared to their corresponding p-values. In this test, the null hypothesis is that every panel has a unit root, and the alternative hypothesis is that at least one panel is stationary. The Levin-Lin Chu unit root test results are shown in Table 4.6.

**Table 4.6: Levin-Lin Chu unit-root test**

<b>Levin-Lin Chu unit-root test</b>			
<b>Variable</b>	<b>Statistic</b>	<b>p value</b>	<b>Comment</b>
DPR	6.4722	0.0000	Stationary
DIO	7.3975	0.0000	Stationary
DSO	6.2126	0.0000	Stationary
DPO	8.2031	0.0000	Stationary
Firm size	7.8718	0.0000	Stationary
Profitability	6.8447	0.0000	Stationary
Leverage	6.8132	0.0000	Stationary

**Source: Research Findings (2022)**

As demonstrated in Table 4.6, this test concludes that the data is stationary at a 5% level of statistical significance since the p-values all fall below 0.05.

#### 4.4 Correlation Results

To determine the degree as well as direction of link connecting every single predictor variable to the response variable, correlation analysis was carried out. The correlation findings in Table 4.7 display correlation nature between the study variables in relation to magnitude a direction.

**Table 4.7: Correlation Results**

		DPR	DIO	DSO	DPO	Firm size	Profitability	Financial leverage
DPR	Pearson Correlation	1						
	Sig. (2-tailed)							
DIO	Pearson Correlation	.037	1					
	Sig. (2-tailed)	.595						
DSO	Pearson Correlation	-.125	.187**	1				
	Sig. (2-tailed)	.071	.006					
DPO	Pearson Correlation	-.017	-.228**	-.156*	1			
	Sig. (2-tailed)	.802	.001	.024				
Firm size	Pearson Correlation	.214**	.125	.156*	.033	1		
	Sig. (2-tailed)	.002	.071	.023	.633			
Profitability	Pearson Correlation	.243**	-.005	-.027	.066	.030	1	
	Sig. (2-tailed)	.000	.938	.699	.339	.667		
Financial leverage	Pearson Correlation	-.183**	.041	.237**	-.132	.196**	-.044	1
	Sig. (2-tailed)	.008	.554	.001	.056	.004	.524	

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).  
 c. Listwise N=210

**Source: Research Findings (2022)**

The results in Table 4.7 reveal that DIO and dividend payout are positively but not significantly correlated ( $r=0.037$ ) at 5 % significance level. Moreover, the outcomes

depict DPO and dividend payout are negatively but not significantly correlated ( $r=-0.125$ ) at 5 % significance level. Further, results show that DSO and dividend payout are also negatively though not significantly correlated ( $r=-0.017$ ) at 5 % significance level. In regards to the control variables, leverage exhibited a negative and significant association with dividend payout ( $r=-0.183$ ) while firm size and profitability exhibited a significant link with dividend payout as shown by p values less than 0.05.

#### 4.5 Regression Results

Regression analysis was performed to determine the extent to which dividend payout is clarified by the selected variables. Tables 4.8 to 4.10, which show the outcomes of the regression, were produced.

**Table 4.8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 <sup>a</sup>	.154	.129	.2938941

a. Predictors: (Constant), Financial leverage, DIO, Profitability, Firm size, DPO, DSO

**Source: Research Findings (2022)**

From the conclusions as adjusted  $R^2$  denoted, the considered independent variables described 15.4% of the dividend payout variations among non-financial listed firms in Kenya. This thus meant the six variables contributed 15.4% of the variations in dividend payout of listed non-financial firms in Kenya whereas other factors not considered in this study contributed 84.6%.

**Table 4.9: ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.203	6	.534	6.180	.000 <sup>b</sup>
	Residual	17.534	203	.086		
	Total	20.737	209			

a. Dependent Variable: DPR  
b. Predictors: (Constant), Financial leverage, DIO, Profitability, Firm size, DPO, DSO

**Source: Research Findings (2022)**

The overall model was statistically significant because the F-test statistic was statistically significant ( $F(6, 209) = 6.180, p < 0.05$ ).

**Table 4.10: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-.413	.221		-2.766	.006
	DIO	.081	.000	.081	1.199	.232
	DSO	-.101	.001	-.103	-1.507	.133
	DPO	-.026	.052	-.015	-.226	.822
	Firm size	.261	.023	.250	3.726	.000
	Profitability	.214	.000	.214	3.165	.000
	Financial leverage	-.202	.046	-.183	-2.696	.008

a. Dependent Variable: DPR

**Source: Research Findings (2022)**

The resultant regression coefficient model was;

$$Y = -0.413 + 0.261X_1 + 0.214X_2 - 0.202X_3$$

Where:

Y = Dividend payout  $X_1$  = Firm size;  $X_2$  = Profitability;  $X_3$  = Leverage

#### **4.6 Discussion of Research Findings**

The research objective was assessing how WCM impact dividend payout of Kenyan listed non-financial firms. The selected variables for this investigation included; DIO, DPO, DSO, profitability, leverage and firm size. A descriptive research design was utilized. Secondary data was gathered from CMA and an analysis made via SPSS. Annual data for 42 listed non-financial firms for five years from 2017 to 2021 was obtained from their annual reports.

The correlation outcomes at 5 % significance level depict DSO and DPO have a weak negative but not substantial link with dividend payout of listed non-financial firms in Kenya. DIO possess weak positive but not significant link with dividend payout of listed non-financial firms. The outcomes disclose that leverage and dividend payout have a negative as well as significant correlation. The outcomes also reveal that both size and profitability had negative as well as significant relation with dividend payout of listed non-financial firms.

Multivariate regression outcomes revealed that the R square was 0.154 implying 15.4% of changes in dividend payout are due to the six variables alterations selected for this study. This means that variables not considered explain 84.6% of changes in dividend payout. The overall model was also statistically significant as the p value was 0.000 which is less than the significance level of 0.05. This implies that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, DIO, DSO and DPO do not possess significant impact on dividend payout of non-financial firms listed at the NSE ( $\beta=0.081$ ,  $p=0.232$ ); ( $\beta=0.-101$ ,  $p=0.133$ ); ( $\beta=-0.026$ ,  $p=0.822$ ). Both firm size and profitability positively affected dividend payout as shown by ( $\beta=0.261$ ,



$p=0.000$ ) and ( $\beta=0.214$ ,  $p=0.000$ ) respectively. Financial leverage exhibited a negative and significant dividend payout influence as shown by ( $\beta=-0.202$ ,  $p=0.008$ ).

These outcomes coincide with Karimi (2020) who was interested in studying how WCM affects the dividends paid by NSE-listed firms. All 63 companies currently trading on the NSE were included in the analysis. Every year from January 2015 through December 2019, secondary data were gathered. A multiple linear regression analysis was performed in order to investigate the dynamics of the connections that exist between the variables. The research found that factors such as business size and profitability had a favorable and considerable impact on the amount of dividends paid out. Both WCM and leverage produced favorable results for this investigation, although those results were not statistically significant.

The outcomes also correspond with Ikunyua (2020) who centered their research on determining whether or not WCM had an effect on the dividend distribution of NSE-listed manufacturing companies. The sample comprised one representative from each of the nine manufacturing companies that are listed on the NSE. The collection of secondary data got underway in January 2015 and will go until December 2019 at the earliest. In the research, the interrelationships between the variables were investigated using a method known as descriptive cross-sectional analysis. Dividend payout ratios benefit from an organization's size, independent of the level of debt financing it uses, as shown by the results of recent research. In this particular research, the WCM and profitability created effects that were not statistically significant.

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

### **5.1 Introduction**

The key aim of the research was determining how WCM influence the dividend payout of listed non-financial firms in Kenya. This section includes a summary of the findings from the previous chapter and the conclusions and limitations of the study. Additionally, it makes recommendations for potential policy measures. The chapter provides recommendations for further research.

### **5.2 Summary of Findings**

The research objective was to assessing how WCM influence dividend payout of listed non-financial firms in Kenya. The research applied a descriptive design whereas population was the 42 listed non-financial firms in Kenya. Complete data was acquired from 42 listed non-financial firms in Kenya and which were considered adequate for regression analysis. The research applied secondary data that was acquired from CMA and individual listed non-financial firms' annual statements. The independent variable was WCM measured as DIO, DSO and DPO while the control variables were; firm size, profitability and leverage. Both descriptive and inferential statistics were useful in examining the data. This section discusses the findings.

The correlation results disclose that DSO and DPO have a weak negative but not substantial link with dividend payout of listed non-financial firms in Kenya. DIO has a weak positive but not significant link with dividend payout of listed non-financial firms. The outcomes disclose that leverage and dividend payout have a negative as well as significant correlation. The outcomes also reveal that both size and

profitability had negative as well as significant relation with dividend payout of listed non-financial firms.

Multivariate regression outcomes revealed that the R square was 0.154 implying 15.4% of changes in dividend payout are due to the six variables alterations selected for this study. This means that variables not considered explain 84.6% of changes in dividend payout. The overall model was also statistically significant as the p value was 0.000 which is less than the significance level of 0.05. This implies that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, DIO, DSO and DPO do not possess significant impact on dividend payout of non-financial firms listed at the NSE ( $\beta=0.081$ ,  $p=0.232$ ); ( $\beta=0.101$ ,  $p=0.133$ ); ( $\beta=0.026$ ,  $p=0.822$ ). Both firm size and profitability positively affected dividend payout as shown by ( $\beta=0.261$ ,  $p=0.000$ ) and ( $\beta=0.214$ ,  $p=0.000$ ) respectively. Financial leverage exhibited a negative and significant dividend payout influence as shown by ( $\beta=-0.202$ ,  $p=0.008$ ).

### **5.3 Conclusions**

The research objective was establishing correlation between WCM and Kenyan listed non-financial firms' dividend payout. The study concludes that DIO, DSO and DPO have no significant impact on dividend payout of listed non-financial firms. The research also comes to the conclusion that WCM as measured by these three variables does not significantly affect the dividend payout of Kenya's listed non-financial firms.

The research outcomes further depicted that firm size exhibited a positive as well as significant influence on dividend payout which might mean that an increase in asset base of a listed firm leads to enhanced dividend payout. This can be described by the fact that listed non-financial firms with more assets are likely to have developed

structures to monitor the internal operations of a firm leading to better dividend payout. Bigger listed non-financial firms are also likely to have better governance structure which can also explain the high dividend payout associated with firm size.

The study conclusions revealed that profitability had a positive and significant impact on dividend payout. This might signify that the listed non-financial firms that have high profitability are able to fulfil their obligations whenever they fall due and are also able to undertake investment chance that might arise in the course of doing business and therefore enhanced dividend payout compared with firms that are less profitable.

The findings designated that leverage had a negative significant impact on dividend payout of listed non-financial firms. This may imply that listed non-financial firms with high debt levels tend to have low levels of dividend payout. This can be clarified by the sense that debt comes with some covenants and it also imply closer monitoring of management actions which negatively affects the dividend payout of listed non-financial firms.

#### **5.4 Recommendations for Policy and Practice**

The research revealed that firm size possesses a significant positive impact on dividend payout of listed non-financial firms. The research recommended the necessity for listed non-financial firms to enhance their asset base by allocating more funds in investing activities as this will lead to a higher dividend payout in the long run. Policy makers ought to develop policies on how listed non-financial firms can enhance their asset base in the most effective way.

From the study findings, profitability was found to increase dividend payout of listed non-financial firms, this research recommending that listed non-financial firms should

focus on maximizing their profitability to sustain their obligations when they fall due whereas simultaneously time enjoying short term investment chances which may arise. The policy makers ought to develop strategies that can aid the firms maximize on profitability.

The study's results indicate that leverage significantly and negatively affected dividend payout. Hence, the research commends that listed non-financial firms ought to come up with an optimal debt level as too much debt can be detrimental to dividend payout. This can be accomplished by having policies and guidelines on the amount of debt that a firm can accumulate for a given period of time.

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

The focus was on various factors which are thought to influence dividend payout of Kenyan listed non-financial firms. The study specifically examined six explanatory factors. Though, in certainty, there is presence of other variables probable to influence dividend payout of firms including internal like liquidity and managerial efficiency whereas others are beyond the control of the firm like interest rates as well as political stability.

In this research, a five-year duration from 2017 to 2021 was selected. There is lack evidence that comparable outcomes will hold across a longer time frame. Moreover, it is impossible to predict if the same outcomes would persist until 2021. Given that additional time contains instances of big economic transitions like recessions and booms, it is more dependable.

The data quality was the main restriction for this research. It is not possible to conclusively conclude that the study's findings accurately reflect the current reality. It has been presumed that the data utilized in the research are precise. Due to the current

conditions, there has also been a great deal of incoherence in the data measurement. The research utilized secondary data rather than primary data. Owing to the constrained data availability, only some of the growth drivers have been considered.

The data analysis was performed using regression models. Owing to the limitations associated with using the model, like inaccurate or erroneous findings emanating from a altering variable value, the researchers would not be able to generalize the conclusions precisely. A regression model cannot be performed using the prior model after data is added to it.

### **5.6 Suggestions for Further Research**

It has been suggested that several areas for advanced future research to be done on the basis of the tangible information gathered and the clarifying comprehension established in this research. First, other WCM aspects influence firm dividend payout apart from the three selected for this study. More research can be conducted to determine and evaluate them. Additionally, other factors moderate, intervene, or mediate the relationship between WCM and firm dividend payout apart from firm size, profitability and leverage. It is possible to locate and examine them with additional research.

The current research scope was restricted to five years; more research can be performed past five years to determine whether the results might persist. Thus, inherent future studies may use a wider time span, which can either support or criticize the current research conclusions. The scope of the study was additionally constrained in terms of context where listed non-financial firms were examined. Further studies can be extended to other firms in Kenya to establish if they complement or contradict the current study findings. Researchers in the East African

region, the rest of Africa, and other global jurisdictions can too perform the research in these jurisdictions to ascertain if the current research conclusions would persist.

The research only used secondary data; alternate research may use primary data sources such in-depth questionnaires and structured interviews given to practitioners and stakeholders. These can then affirm or criticize the results of the current research.

This research used multiple linear regression as well as correlation analysis; future research could use other analytic techniques such factor analysis, cluster analysis, granger causality, discriminant analysis, and descriptive statistics, among others.

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## APPENDICES

### Appendix I: Research Data

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profitability</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
1	2017	0.6494	121.6900	49.5800	47.3400	0.0274	10.6704	0.5125
1	2018	0.6452	120.7400	52.0600	40.7100	-0.0001	10.7481	0.4556
1	2019	0.7353	185.0100	54.3400	58.6500	0.0536	10.7555	0.6756
1	2020	0.7813	131.2400	56.9700	59.1600	0.0098	10.6072	0.7448
1	2021	0.8029	124.6900	45.8400	50.0800	0.0536	10.5128	0.7232
2	2017	0.2959	67.3500	51.2600	86.2500	-0.1178	10.7004	0.2742
2	2018	0.3463	84.0700	53.7500	89.8400	-0.1178	10.5685	0.3254
2	2019	0.3030	88.8900	47.5500	101.7200	-0.0144	10.6622	0.2887
2	2020	0.4020	73.9200	50.6800	97.4500	-0.1168	10.6433	0.2953
2	2021	0.4587	58.2900	44.4200	72.9900	0.0250	10.6736	0.2754
3	2017	0.1095	8.9000	36.5400	36.9500	-0.0419	10.0131	0.6428
3	2018	0.1024	9.1900	34.5700	30.9600	0.0843	10.0270	0.6662
3	2019	0.0965	8.7000	47.4500	41.0100	0.0635	9.9937	0.6639
3	2020	0.1096	8.1700	46.7100	42.7100	0.1020	9.9513	0.6526
3	2021	0.1087	11.2600	45.7200	40.7800	0.1020	9.8789	0.6372
4	2017	0.5983	137.5600	71.2300	432.5600	0.0091	9.5594	0.1158
4	2018	0.5072	139.3100	67.1900	424.3100	0.0213	9.5288	0.1323
4	2019	0.4762	131.9500	62.6000	319.2500	0.0842	9.5126	0.1656
4	2020	0.4516	139.6300	66.8300	353.8000	0.0571	9.4437	0.1472
4	2021	0.3627	108.7900	70.8900	304.7900	0.0842	9.3833	0.1270
5	2017	0.0400	34.5200	94.7800	103.8600	-0.0820	9.8088	0.7007
5	2018	0.0500	32.2500	98.6100	109.8700	-0.1303	9.7441	0.6912
5	2019	0.0100	32.6600	109.2600	99.0500	-0.1564	9.6970	0.7020
5	2020	0.0100	28.0600	80.7200	112.8300	0.0213	9.6258	0.6503
5	2021	0.0700	27.5300	80.8300	63.0400	0.0842	9.5091	0.5377
6	2017	0.0000	3.8000	159.2500	40.3600	-0.0687	9.8875	0.7331
6	2018	0.0000	4.5100	158.3200	39.5200	-0.1260	9.9179	0.6613
6	2019	0.0200	6.0000	153.6300	41.4500	-0.1490	9.9635	0.5954
6	2020	0.3900	2.5000	154.9000	167.5800	0.0571	9.9370	0.6081
6	2021	0.0600	2.5000	154.9000	167.5800	0.0842	9.8731	0.5497
7	2017	0.0000	18.2300	29.3600	259.3700	-0.2126	10.4771	0.3826
7	2018	0.1500	17.8900	27.9400	205.3800	0.1207	10.4847	0.3554
7	2019	0.3100	22.6300	36.3400	231.5000	-0.2479	10.4038	0.4025
7	2020	0.0000	12.5500	38.5300	247.0300	-0.1490	10.2364	0.5734
7	2021	0.1100	15.1700	46.6600	325.3100	0.0571	10.2477	0.5605

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profita bility</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
8	2017	0.0000	159.3200	61.5300	98.2300	0.0213	8.9280	0.2890
8	2018	0.7874	181.0100	65.4600	89.4100	0.0266	9.0746	0.5506
8	2019	0.0000	166.6400	58.2400	103.5900	-0.0296	9.2195	0.4309
8	2020	0.0000	164.7400	65.8600	90.4400	0.1042	9.0085	0.7651
8	2021	0.0000	149.2600	58.9200	73.2200	0.0977	9.0134	0.5803
9	2017	0.1000	137.2500	117.5600	56.3600	0.0902	9.7994	0.2478
9	2018	0.1100	131.8200	115.7300	53.0700	0.0621	9.7445	0.2405
9	2019	0.1200	138.6300	101.5500	31.2000	0.0630	9.5207	0.3577
9	2020	0.0400	118.6300	119.8900	48.7400	0.0293	9.6263	0.2284
9	2021	0.0500	155.4700	94.0900	45.9600	0.0273	9.6103	0.2211
10	2017	0.0200	69.8500	54.2100	206.3100	0.0254	11.6166	0.5144
10	2018	0.0200	101.3500	53.8400	195.2200	0.0159	11.6050	0.5296
10	2019	0.1900	70.3400	57.4500	217.1500	0.0057	11.5747	0.5866
10	2020	0.0200	65.9100	51.6600	188.7300	-0.1535	11.4383	0.6934
10	2021	0.0300	148.4500	44.1400	193.0800	-0.0578	11.3157	0.6071
11	2017	0.0900	49.6500	78.6500	93.2100	0.0254	10.4220	0.5346
11	2018	0.0900	55.3100	107.6500	96.6200	-0.0148	10.4238	0.5924
11	2019	0.1000	42.0400	89.2800	71.4500	0.7202	10.2800	0.5076
11	2020	0.0400	32.6300	77.7600	87.7200	-0.0046	10.4187	0.6935
11	2021	0.0200	34.4800	100.9000	108.6700	0.0621	10.4890	0.7629
12	2017	0.0200	197.2300	56.3200	73.2500	0.0630	11.5736	0.7952
12	2018	0.0200	204.0100	46.9200	80.8100	-0.1528	11.5135	0.7848
12	2019	0.0300	167.9600	50.0000	71.4300	-0.0988	11.4801	0.6970
12	2020	0.0400	201.9900	54.4000	67.4700	0.0865	11.3842	0.6677
12	2021	0.0300	153.0800	49.5000	49.6900	0.0420	11.2884	0.6829
13	2017	0.0000	151.2600	156.3200	197.2300	0.1039	11.2048	1.3073
13	2018	0.0000	119.6800	144.4600	163.2500	0.1207	11.2322	1.2291
13	2019	0.0000	173.6500	130.1500	207.2000	-0.2479	11.3002	1.0328
13	2020	0.0000	226.2300	167.8200	321.8600	-0.1490	11.2122	0.8101
13	2021	0.0000	252.5500	210.6800	423.6700	0.1207	11.1288	0.7456
14	2017	0.5688	112.3600	63.5400	111.2300	-0.0135	11.2487	0.1556
14	2018	0.9460	148.1000	61.7700	114.1900	-0.0988	11.2419	0.1738
14	2019	0.7737	93.3900	82.7100	125.2800	0.0865	11.2358	0.3356
14	2020	0.8656	95.8500	71.4300	89.5300	-0.1528	11.1690	0.3222
14	2021	0.8229	109.0100	80.9300	100.6000	-0.0988	11.1501	0.3771
15	2017	0.3888	76.2300	17.3200	69.8300	0.0865	9.5127	0.3930
15	2018	0.4301	74.0400	16.6700	81.8200	-0.0475	9.5573	0.4443
15	2019	0.4566	60.6200	14.9000	57.4500	0.0359	9.6142	0.3845
15	2020	0.4000	69.6700	21.9200	103.1300	-0.0586	9.6263	0.3275

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profitability</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
15	2021	0.3810	82.5600	24.3300	75.8600	-0.0988	9.6045	0.2696
16	2017	0.0200	96.3200	61.5800	81.5200	0.0865	10.1604	0.1425
16	2018	0.0300	84.9100	58.1400	75.8400	-0.0071	10.2658	0.1037
16	2019	0.1300	100.4600	60.0100	78.4700	0.0972	10.2453	0.0904
16	2020	0.3800	86.1100	65.5300	75.8600	-0.2502	10.2140	0.1881
16	2021	0.0100	117.0200	68.5500	93.6600	0.0250	9.9969	0.2950
17	2017	0.0000	39.8100	43.5600	73.4900	-0.0419	9.6893	0.5820
17	2018	0.0500	82.9900	23.2100	72.5700	0.0843	9.6839	0.5287
17	2019	0.0000	72.5600	34.6100	76.2200	0.0731	9.6790	0.5689
17	2020	0.0500	58.8600	26.0700	72.3400	0.0693	9.6529	0.4618
17	2021	0.0500	52.0000	30.7600	78.6100	0.0096	9.6594	0.5065
18	2017	0.0700	51.2300	26.7300	26.8900	0.0843	10.6199	0.4366
18	2018	0.0600	17.2300	24.8100	17.6700	0.0292	10.5985	0.4653
18	2019	0.0500	41.7100	21.0700	21.1400	-0.0510	10.5743	0.4858
18	2020	0.0400	49.4800	39.9000	18.4100	-0.1076	10.5524	0.4953
18	2021	0.0300	53.0400	30.4400	59.5400	-0.0104	10.6419	0.6154
19	2017	0.0000	47.2600	43.2500	59.6300	0.0060	10.3128	1.0060
19	2018	0.0000	49.5700	27.5900	49.4900	0.0507	10.3167	0.7975
19	2019	0.0000	50.0100	32.5200	43.9500	0.0552	10.3167	0.9662
19	2020	0.0000	58.8300	36.8300	60.8700	-0.0104	10.3788	0.3658
19	2021	0.0300	96.2500	109.2000	106.3600	0.0060	10.4173	0.4455
20	2017	0.0000	56.4900	146.4500	144.5300	-0.1508	9.7392	1.4193
20	2018	0.0000	69.5300	151.1800	155.3800	-0.0908	9.8471	0.8674
20	2019	0.0800	42.5800	186.7000	132.8700	-0.0753	9.8779	0.5202
20	2020	0.0600	61.5600	244.3500	117.2500	-0.0549	9.7861	0.4751
20	2021	0.1477	33.3200	139.8400	129.9100	-0.0104	10.0515	0.4664
21	2017	0.6623	93.3100	78.9600	98.5600	0.0060	10.0038	0.3808
21	2018	0.2315	86.0400	56.3900	91.3200	0.1785	9.9781	0.3826
21	2019	0.1898	148.1000	61.8000	92.7000	0.0432	9.9445	0.3937
21	2020	0.2055	93.4000	82.7000	119.0000	0.0739	9.9489	0.4708
21	2021	0.1200	106.7000	109.4000	114.9000	-0.0104	10.0939	0.2786
22	2017	0.1300	56.3200	81.3200	43.6500	0.0060	10.1254	0.2851
22	2018	0.1600	45.2300	67.1200	49.8700	0.0171	10.1437	0.2948
22	2019	0.2000	27.1000	73.0000	44.7000	-0.1139	10.1172	0.2659
22	2020	0.2300	50.4000	93.5000	51.1000	0.0332	10.0986	0.2797
22	2021	1.5476	99.9000	63.1000	63.7000	-0.0104	9.3880	0.2771
23	2017	2.5743	30.0000	32.0000	622.0000	0.0060	9.3871	0.2403
23	2018	0.8037	28.0000	32.0000	618.0000	-0.0044	9.4057	0.2615
23	2019	0.6833	31.0000	30.0000	615.0000	0.0472	9.4018	0.2405

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profitability</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
23	2020	0.4422	30.0000	33.0000	600.0000	0.0046	9.4605	0.2165
23	2021	0.7650	30.0000	36.0000	641.0000	-0.0001	10.8639	0.8202
24	2017	0.5664	31.0000	29.0000	614.0000	0.0556	10.8306	0.8878
24	2018	0.4508	30.0000	35.0000	560.0000	0.0072	10.8657	0.8005
24	2019	0.6625	30.0000	31.0000	572.0000	0.0038	10.8384	0.8552
24	2020	0.6691	31.0000	41.0000	592.0000	0.0274	10.8013	0.8684
24	2021	0.1700	29.0000	30.0000	622.0000	-0.0001	9.0051	0.0783
25	2017	0.0500	31.0000	36.0000	606.0000	0.0536	8.9215	0.0910
25	2018	0.0100	34.0000	30.0000	611.0000	0.0098	8.6734	0.1478
25	2019	0.0000	30.0000	34.0000	368.0000	0.0250	8.6891	0.1914
25	2020	0.1000	32.0000	28.0000	324.0000	-0.0419	10.0180	0.2388
25	2021	0.0000	29.0000	30.0000	590.0000	0.0843	9.9624	0.2651
26	2017	0.0500	28.0000	28.0000	610.0000	0.0246	9.9909	0.2212
26	2018	0.0100	28.0000	38.0000	580.0000	0.3097	9.9724	0.2289
26	2019	0.0900	26.0000	28.0000	610.0000	0.1489	9.9714	0.2535
26	2020	0.0000	28.0000	33.0000	602.0000	-0.0579	9.3476	0.3028
26	2021	0.0500	31.0000	27.0000	610.0000	0.2164	9.3713	0.2939
27	2017	0.0000	90.0000	60.0000	105.0000	0.0087	9.3374	0.2801
27	2018	0.0700	85.0000	57.0000	116.0000	-0.0104	9.3254	0.2843
27	2019	0.0900	82.0000	54.0000	109.0000	0.0060	9.3577	0.3822
27	2020	0.0000	81.0000	55.0000	111.0000	0.0282	8.4583	0.2833
27	2021	0.0000	92.0000	65.0000	120.0000	0.0060	8.4905	0.2710
28	2017	0.0100	89.0000	57.0000	110.0000	-0.0029	8.5366	0.2674
28	2018	0.0000	81.0000	51.0000	111.0000	-0.0294	8.5697	0.2358
28	2019	0.0800	90.0000	63.0000	109.0000	0.0556	8.5753	0.2410
28	2020	0.0000	91.0000	72.0000	116.0000	-0.0383	8.6141	1.1388
28	2021	0.0000	86.0000	66.0000	119.0000	-0.0104	8.6193	0.9389
29	2017	0.0000	81.0000	59.0000	116.0000	0.0060	8.6853	0.7282
29	2018	0.0000	86.0000	56.0000	112.0000	0.0278	8.7194	0.6733
29	2019	0.0000	82.0000	61.0000	106.0000	0.0202	8.7217	0.5869
29	2020	0.0100	84.0000	71.0000	108.0000	0.0124	10.2827	0.4759
29	2021	0.0000	81.0000	62.0000	111.0000	0.0282	10.2700	0.4368
30	2017	0.0000	76.0000	52.0000	111.0000	-0.0187	10.2391	0.3876
30	2018	0.0100	81.0000	56.0000	108.0000	0.0031	10.2425	0.3467
30	2019	0.0300	74.0000	58.0000	114.0000	-0.0152	10.2478	0.3458
30	2020	0.0400	86.0000	51.0000	116.0000	0.0250	10.1786	0.3484
30	2021	0.0300	84.0000	48.0000	108.0000	-0.0419	10.1699	0.3469
31	2017	0.0200	81.0000	51.0000	110.0000	0.0843	10.1358	0.3099
31	2018	0.0400	78.0000	53.0000	114.0000	0.0635	10.1633	0.3569

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profitability</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
31	2019	0.0600	86.0000	54.0000	112.0000	0.1020	10.1453	0.3686
31	2020	0.0000	84.0000	47.0000	109.0000	-0.0104	8.1975	0.6834
31	2021	0.0300	82.0000	56.0000	114.0000	0.0060	8.2315	0.6793
32	2017	0.0300	78.0000	49.0000	110.0000	0.0975	8.0883	0.5936
32	2018	0.1000	81.0000	50.0000	116.0000	0.0955	7.9403	0.7626
32	2019	0.0300	80.0000	52.0000	108.0000	0.0878	7.6941	0.7537
32	2020	0.0000	83.0000	51.0000	111.0000	0.0837	9.6911	1.0875
32	2021	0.0000	82.0000	50.0000	114.0000	0.0498	9.6344	1.0535
33	2017	0.0000	76.0000	51.0000	110.0000	-0.0104	9.6268	1.0108
33	2018	0.0000	79.0000	53.0000	116.0000	0.0060	9.6104	0.9063
33	2019	0.0300	82.0000	52.0000	114.0000	0.0060	9.5264	0.8892
33	2020	0.0000	81.0000	47.0000	112.0000	-1.7648	8.1875	0.5301
33	2021	0.0000	84.0000	49.0000	109.0000	-1.2855	8.7480	0.5264
34	2017	0.0000	81.0000	51.0000	111.0000	0.0282	8.8210	0.5370
34	2018	0.0000	79.0000	49.0000	109.0000	0.0712	8.7519	0.4524
34	2019	0.0000	83.0000	52.0000	114.0000	0.2803	8.1494	0.4029
34	2020	0.1000	84.0000	53.0000	113.0000	0.0217	9.3639	0.0457
34	2021	0.0900	81.0000	52.0000	110.0000	0.0113	9.3440	0.0748
35	2017	0.1600	80.0000	52.0000	110.0000	0.0336	9.3229	0.0748
35	2018	0.1900	81.0000	49.0000	111.0000	0.0184	9.2666	0.0843
35	2019	0.2300	79.0000	51.0000	109.0000	0.0239	9.1004	0.3640
35	2020	0.8568	81.0000	51.0000	108.0000	0.0208	10.2906	0.5597
35	2021	0.7794	80.0000	52.0000	110.0000	0.0001	10.3072	0.5245
36	2017	1.1691	80.0000	51.0000	111.0000	0.0060	10.3114	0.5261
36	2018	0.8541	81.0000	50.0000	108.0000	0.0668	10.3013	0.5548
36	2019	0.9988	83.0000	52.0000	110.0000	0.0324	10.2701	0.0246
36	2020	0.0600	79.0000	49.0000	111.0000	0.0065	10.4682	0.7179
36	2021	0.0000	78.0000	48.0000	108.0000	0.0278	10.3503	0.7097
37	2017	0.0000	81.0000	50.0000	110.0000	0.0202	10.4122	0.6361
37	2018	0.0000	80.0000	51.0000	109.0000	0.0083	10.4759	0.5670
37	2019	0.0600	82.0000	49.0000	112.0000	0.0082	9.3092	0.4912
37	2020	0.0500	79.0000	48.0000	108.0000	0.0132	9.3111	0.4925
37	2021	0.0900	80.0000	51.0000	109.0000	0.0060	8.8784	0.4482
38	2017	0.1300	80.0000	50.0000	111.0000	0.0211	8.9165	0.4229
38	2018	0.1700	81.0000	52.0000	109.0000	0.0060	8.8757	0.4367
38	2019	0.0000	79.0000	49.0000	112.0000	-0.0217	9.3983	0.4861
38	2020	0.0400	78.0000	51.0000	109.0000	0.0201	9.4355	0.3917
38	2021	0.0300	80.0000	50.0000	108.0000	0.0060	9.3327	0.2804
39	2017	0.0000	81.0000	51.0000	110.0000	-0.0022	8.7813	0.5297

<b>Firm ID</b>	<b>Year</b>	<b>DPR</b>	<b>DIO</b>	<b>DSO</b>	<b>DPO</b>	<b>Profita bility</b>	<b>Firm size</b>	<b>Financial leverage</b>
<b>Units</b>		<b>Ratio</b>	<b>Days</b>	<b>Days</b>	<b>Days</b>	<b>Ratio</b>	<b>Log</b>	<b>Ratio</b>
39	2018	0.0498	80.0000	49.0000	111.0000	0.0267	8.3074	0.4680
39	2019	0.0389	79.0000	50.0000	109.0000	0.0045	8.3560	0.4500
39	2020	0.0387	81.0000	53.0000	114.0000	0.0033	8.3943	0.4420
39	2021	0.0360	82.0000	52.0000	112.0000	0.0060	8.4223	0.3410
40	2017	0.0284	80.0000	51.0000	108.0000	0.0113	8.4542	0.2830
40	2018	0.0498	81.0000	52.0000	107.0000	0.0336	8.3074	0.4000
40	2019	0.0389	79.0000	49.0000	111.0000	0.0184	8.3560	0.3180
40	2020	0.0387	82.0000	49.0000	112.0000	0.0239	8.3943	0.3990
40	2021	0.0360	81.0000	51.0000	108.0000	0.0208	8.4223	0.4000
41	2017	0.0284	81.0000	50.0000	110.0000	0.0001	8.4542	0.3350
41	2018	0.0449	80.0000	51.0000	109.0000	0.0034	8.3308	0.3260
41	2019	0.0446	78.0000	48.0000	114.0000	0.0096	8.3832	0.3380
41	2020	0.0471	82.0000	52.0000	112.0000	0.0278	8.3873	0.3760
41	2021	0.0278	81.0000	51.0000	106.0000	0.0202	8.4092	0.3370
42	2017	0.0374	80.0000	51.0000	110.0000	0.1042	8.4388	0.4600
42	2018	0.0417	79.0000	50.0000	108.0000	0.0977	8.0748	0.6790
42	2019	0.0414	78.0000	49.0000	109.0000	0.0902	8.1230	0.4140
42	2020	0.0427	81.0000	48.0000	110.0000	0.0621	8.2037	0.7370
42	2021	0.0386	82.0000	50.0000	111.0000	0.0630	8.2595	0.5460



## Appendix II: Non-Financial Firms Listed at the NSE

	<b>COMPANY</b>	<b>SECTOR</b>	<b>YEAR OF LISTING</b>
	<u>Deacons (East Africa)</u>	Consumer Services	2016
2.	<u>Nairobi Business Ventures</u>	Consumer Services	2016
3.	<u>Atlas African Industries</u>	Industrials	2014
4.	<u>Flame Tree Group Holdings</u>	Basic Materials	2014
5.	<u>Kurwitu Ventures</u>	Consumer services	2014
6.	<u>Umeme</u>	Utilities	2012
7.	<u>TransCentury</u>	Industrials	2011
8.	<u>Safaricom</u>	Telecommunications	2008
9.	<u>Eveready East Africa</u>	Consumer Goods	2006
10.	<u>KenGen Company</u>	Utilities	2006
11.	<u>WPP Scangroup</u>	Consumer Services	2006
12.	<u>Mumias Sugar Co</u>	Consumer Goods	2001
13.	<u>ARM Cement</u>	Industrials	1997
14.	<u>TPS Eastern Africa</u>	Consumer Services	1997
15.	<u>Kenya Airways</u>	Consumer Services	1996
16.	<u>Sameer Africa</u>	Consumer Goods	1994
17.	<u>Longhorn Publishers</u>	Consumer Services	1993
18.	<u>Crown Paints Kenya</u>	Basic Materials	1992
19.	<u>Uchumi Supermarkets</u>	Consumer Services	1992
20.	<u>Total Kenya</u>	Oil & Gas	1988



21.	<u>Express Kenya</u>	Consumer Services	1978
22.	<u>Olympia Capital Holdings</u>	Industrials	1974
23.	<u>East African Cables</u>	Industrials	1973
24.	<u>Nation Media Group</u>	Consumer Services	1973
25.	<u>Carbacid Investments</u>	Basic Materials	1972
26.	<u>Eaagads</u>	Consumer Goods	1972
27.	<u>East African Breweries</u>	Consumer Goods	1972
28.	<u>East African Portland Cement</u>	Industrials	1972
29.	<u>Kapchorua Tea Kenya</u>	Consumer Goods	1972
30.	<u>Kenya Power &amp; Lighting</u>	Utilities	1972
31.	<u>Williamson Tea Kenya</u>	Consumer Goods	1972
32.	<u>Unga Group</u>	Consumer Goods	1971
33.	<u>Bamburi Cement</u>	Industrials	1970
34.	<u>B O C Kenya</u>	Basic Materials	1969
35.	<u>BAT Kenya</u>	Consumer Goods	1969
36.	<u>Limuru Tea</u>	Consumer Goods	1967
37.	<u>Sasini</u>	Consumer Goods	1965
38.	<u>KenolKobil</u>	Oil & Gas	1959
39.	<u>Kenya Orchards</u>	Consumer Goods	1959
40.	<u>Standard Group</u>	Consumer Services	1954
41.	<u>Kakuzi</u>	Consumer Goods	1951
42.	<u>Car &amp; General (K)</u>	Consumer Services	1940

**Source: NSE (2022)**