THE EFFECT OF FIRM CHARACTERISTICS ON FINANCIAL DISTRESS OF SELECTED RETAIL SUPERMARKET CHAINS IN NAIROBI CITY COUNTY, KENYA

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DECLARATION

I state that, this research project is indeed my actual work and has never before been submitted for degree in another award or university.

GEORGE KIKULUI MUSUMBI **D61/11229/2018**

Sign  Date…02/**11/2023**……

This specific research project has been presented with my approval for examination as theuniversity supervisor.

Sign…  Date…07/11/2023

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ABBREVIATIONS

CMA: Capital Markets Authority

GCC: Gulf Corporation Council

GDP: Gross Domestic Product

M.D.A: Multivariate Discriminant Analysis

N.S.E: Nairobi Securities Exchange

UAE: United Arab Emirates

UK: United Kingdom

SPSS Statistical Package for Social Scientist

SVM: Support Vector Mechanism

ABSTRACT

Company under financial distress plunges into a strained cash situation and is unable to pay debts as they become due, this state of affairs can compel an organization into liquidation or bankruptcy. A company's ability to stay operational is considered to be greatly linked to its characteristics like efficiency, liquidity, firm size, and leverage. The study objective was to demonstrate the effect of firm characteristics on the financial distress of selected retail supermarket chains in Nairobi city county, Kenya. The study was anchored on Operating Cycle Theory, The Trade-off Theory and The Agency Theory. Descriptive research design was adopted to demonstrate the effect of firm characteristics on financial distress of selected retail supermarket chains in Nairobi City County, the target population of this research dealt with the nine (9) selected retail supermarket chains in Nairobi City County; secondary data sources were applied. For data analysis, SPSS software was utilized, descriptive and inferential statistics were used to analyze the case. The study revealed that retail supermarket chains in Nairobi experienced financial distress in the years 2020 and 2021; adequate liquidity provides a buffer against financial distress, while poor liquidity management can increase the risk of facing financial difficulties. Efficient management practices perform an important role in mitigating or preventing financial distress and that larger chains enjoy access to resources that provide a buffer against financial distress, the study concludes that increase in firm liquidity, financial leverage, management efficiency and firm size each of them have vital influence on the financial distress of selected retail supermarket chains in Nairobi City County. As per the results of the research, it was proposed that there is a necessity by the retail supermarket chains in Nairobi City to effectively manage their working capital to ensure they have enough liquidity to cover short-term and long-term

obligations, striking the right balance between debt and equity financing is crucial for retail supermarket chains in Nairobi City to effectively manage financial distress risks and maintain a stable financial position and that it is important to adopt strong management practices in strategic planning, cost control, inventory management, human resource management, customer service, and overall decision-making.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The direction taken by a company into its future is determined by every single decision made by management. These decisions are however based on economic conditions prevailing in its industry, the composition of its shareholding, corporate governance and financial prospects based on a firm's current potential (Changqing, Xie & Xiang 2011). According to Maina & Sakwa (2012), the ordinary situations which define financial distress comprise bankruptcy, insolvency, and failure. Business failure is shown by organizational difficulties ascertained by financial signals arising from the poor performance leading to bankruptcy followed by financial distress. Due to inadequate resources, the firm will take a descending spiral trend and this result to a poor strategic standing indicated by a notable fall in liquidity levels, cash flow, poor profitability and sales.

According to Aasen (2011), financial distress costs take two forms: direct bankruptcy costs which include administrative along with legal costs and the indirect bankruptcy cost which relates to the strain of running a company experiencing insolvency. According to Senbet & Wang (2012), financial distress can be related to a state where the firm starts to experience difficulty in honoring its contracts with creditors. However, how firms are keen and utilize aggressive strategies, they still face financial distress. The success of any firm and operations is anchored on the effectiveness of management and other stakeholders in executing its operations. A company under financial distress plunges into a strained cash situation and is unable to pay debts as they become due, this state of

affairs can compel an organization into liquidation or bankruptcy (Hu, 2011). Financial distress has become a worldwide issue affecting the developing and developed financial systems, hence the need for an investigation on the main determining factors of financial distress (Kemboi, 2012).

As per Pandey (2005) investors, suppliers and creditors respond individually to firms encountering financial distress. Suppliers will automatically stop giving credit fearing that these firms will be liquidated, while investors set a higher cost of capital with strict terms and conditions or stop supplying additional capital to the firm in distress. Creditor become less tolerant. Firms experiencing financial distress may have difficulties securing financing and also increase the cost of borrowing supplementary capital. Management to satisfy short-term commitments might settle for more profit-making long-term projects. Their market value may drop significantly and customers may start to cut back orders while suppliers change their delivery terms. Employees of a firm under distress will have low morale due to the elevated bankruptcy risk that would possibly compel them out of their jobs in the future. Under such a burden workers become less productive.

Several studies, both internationally and locally have been conducted over the past four decades. Practitioners and academics have conducted an extensive study on financial distress, but they have not come up with a consensual conclusion. Literature reviews of distinct studies have produced conflicting findings. As per Umar, Aslam, Sajid, & Tanveer (2012), efficiency, firm size, liquidity, and leverage have been indicated to be significantly and negatively correlated to financial distress. According to Velnampy (2013), financial leverage, management efficiency and firm size have a positive impact towards financial distress. Outecheva (2007) outlined financial distress as a bit-by-bit affair whereby a company can go in and out of an economical difficulty. Therefore, if a

firm experiences financial distress, it either recovers or is liquidated.

It's generally assumed that firms will operate on a going concern basis, hence continue with their activities in perpetuity. Although, this may not always be the case as firms often encounter unforeseen events which lead to failure. On the contrary, the study by Pratheepkanth (2011) concluded that firm growth, liquidity, profitability, and efficiency do not affect financial distress. According to Begley, Ming & Watts (1996) bankruptcy which may lead to administration or liquidity is the legal position in which a firm cannot pay off debts it owes creditors. Insolvency is a financial state within a firm whereby its liabilities surpass its assets, usually referred as balance sheet insolvency. To fix this situation so that bankruptcy can be avoided, immediate measures are required. Such measures include debt repayments, negotiating current debts and minimizing overhead costs. Balance sheet insolvency refers to when the company asset value is below the liabilities' amount, while cash-flow insolvency is inadequate liquidity to pay debts as they fall due.

1.1.1 Firm Characteristics

Firms' characteristics are aspects that directly influence the firms. These characteristics have influenced the financial potential of the supermarket industry within Kenya which has led into financial distress. Factors leading to financial distress vary from one firm to another. According to Zou & Stan (1998) firm characteristics are the managerial and demographic variables of a firm that consecutively become part of its internal environment. Some of the variables which make up firm characteristics are the informational and knowledge capabilities and processes within a firm activity. The research will evaluate the liquidity effect, efficiency, firm size and leverage on financial distress.

According to Omondi & Muturi (2013) firm leverage is the debt-equity ratio in its capital structure, meaning that when a company is hugely leveraged then it has more debt than equity. Liquidity is company ability to change short term assets to revenue and thus able to fulfill its daily obligation (Douglas, 2014) and is indicated by its gross current assets to gross current liabilities ratio. It is only good for a company to maintain some degree of liquiditysince an elevated liquidity ratio can suggest it lacks managerial acumen to utilize the excess current assets and a very low liquidity ratio is an indication that the firm might encounter financial difficulties in the near future.

Efficiency of a firm which is also referred as the turnover ratio is ascertained by the firm's productivity level after utilizing its assets. To evaluate the current performance, a firm efficiency ratio which relates to the operating expenses is determined as a percentage over revenues used. An increase in cost or a decrease in revenue is shown by an increase of this ratio (Taylor, 2008).

1.1.2 Financial Distress

A financial distress arises when firm cannot raise revenue as a result of its inability to meet financial obligations. It relates to the situation in which a firm faces financial difficulty to pay for obligations that have matured. Financial difficulties start when firm cash flow forecasts show that it will be incapable of honoring its commitments in the future (Brigham & Daves, 2003). There are three sources of financial distress; firm, industry, and macro factors. Firm-level factors include leverage and operating risk. The industry-level factors are as identified by Michael Porter's five forces; bargaining power of buyers, rivalry among competing firms, entry or barriers of exit, the substitute products threat and sellers bargaining power (Porter, 2008). Macro-level factors include recession.

1.1.3 Financial Distress and Firm Characteristics

Firm characteristics are special qualities of an organization that differentiate it from the others. Furthermore, factors that are prevailing in the industry in which a firm operates like Government regulations can lead to the financial distress of that firm. Liquidity can be defined as the ability to raise funds as and when the need arises and the inability of timely raising such funds shows the firm is experiencing financial distress. According to Karger & Blumenthal (1994), if firms have inaccurate procedures of liquidity management, they may face bankruptcy even when their profits are consistently positive. When liquidity levels are insufficient a firm will have issues running its day to day operations while liquidity levels can contribute to below par return on assets.

The agency theory (Jensen & Meckling, 1998) is applicable to this study from a financial manager point of view who acts as an agent of firm shareholders. The theory enlightens

the leverage and liquidity variables of management. If the principal-agent issues are not properly addressed then this may give rise to poor leverage and liquidity management and cash misuse practices arise. Inventory management will not apply the economic order quantity. Under principal-agent problems, payables and receivables will not be paid and collected respectively as they fall due. These unfavorable practices caused by the principal-agent issues lead to financial distress of companies.

The operating capacity of a firm reflects the level of it's effectiveness and efficiency in operational activities and is measured by asset turnover rate (Kip, 2012). Higher asset turnover indicates a firm can effectively and efficiently manage their assets in their operational activities thus resulting in high performance and reducing chances of financial distress. The leverage of a firm indicates to what level debt has been utilized in financing its assets. Generally, a firm with higher capital to debt ratio is said to be financially healthy and unlikely to experience financial distress. Firm size is the diversity and quantity of its productive capacity and ability. Alternatively, the quantity and diversity of goods, the firm is required to offer its consumers (Mule, Mukras & Nzioka, 2015).

1.1.4 The Kenyan Supermarket Industry

Supermarket sub-sector has been identified as the fifth-largest contributor to Kenya's GDP and also the third-largest private-sector employer. Most retail supermarkets have cited financial difficulties in their performance which has played a major role in leading the firms into financial distress. Not all players in the Kenya retail supermarket industry are experiencing financial difficulties since there has been expansion of the existing ones, the industry has witnessed the exit of key players, entrance of new players and reduced

operations by others which can be attributed to many factors among them mismanagement and the misappropriation of funds. This has greatly affected shareholders and employees.

Kenya through the Capital Markets Authority has stressed on the detrimental effect of financial crisis amidst retail supermarket business. This has led to some of the businesses having their financial positions and management inspected through a comprehensive restructuring, receivership or being deregistered from the Nairobi Securities Exchange altogether. Despite the efforts made by the government regulatory authorities to prove that financial distress has occurred due to aggressive funding, experts and scholars reject these theories because they lack evidence to back their claims and also serve political convenience. The argument among finance experts is further confusing since the verified connection linking firm characteristics and financial distress signs of a firm are not confirmed. In these circumstances, research to investigate association between financial distress and characteristics of retail supermarkets in Kenya is important.

1.2 Research Problem

A company's ability to stay operational is considered to be greatly linked to its characteristics like management efficiency, liquidity, firm size, and financial leverage. Previous empirical studies have failed to establish that the above factors are crucial in driving firms into financial difficulties. Several studies which have been conducted on financial distress and specific firm characteristics have found contradicting empirical evidence. These studies include; Talian (2012), postulated that when forecasting the financial distress in Kenya, financial factors are more dependable while according to Kodongo, Maina & Mokoaleli- Mokoteli (2014), firm growth, profitability, liquidity, and efficiency do not affect financial distress.

An observation has been made of an increasing trend of failure among retail supermarket firms in Nairobi City County, Kenya. The Contribution of these supermarkets has been critical to the economy. Some of these firms have been delisted from the NSE (CMA, 2018). Almostall retail supermarket firms face obstacles in reaching a trade-off between shortage and surplus working capital. Some have a challenge with excessive leverage which leads to the high cost of interest. This result in failure to pay their daily expenses and missing the chance to exploit new markets as well as creating lucrative ventures leading to financial difficulties.

Kenyan studies focused on; local authorities (Ouma, 2011), financial distress causes (Memba & Abuga, 2013), insurance companies (Kosikoh, 2014). Studies on non-financial firms include; (Malik, 2011; Karagu & Okibo, 2014; Al-tamini, 2010; Kamau & Oluoch, 2016; Kariuki, 2013, among others) and they concentrated largely on the firms' financial capability. These studies also concentrated mainly on effect of innovation, macro or micro-economic variables, internal variables and financial variables among

other specific firm characteristics on the firms' financial performance.

However, finding of some of these studies may not be applicable to the retail supermarket sub-sector in Kenya since the data on which they were based on was from other countries. Local studies, on the other hand, have been unsuccessful in explaining the degree to which characteristics of retail supermarket firms affect financial distress. This research was dependent on the above-identified variations and attempted to respond to the study question: What is the effect of firm characteristics on the financial distress of selected retail supermarket chains within Nairobi City, Kenya?

1.3 The Research Objective

The study objective was demonstrating the effects of firm characteristics on thefinancial distress of the selected retail supermarkets in Nairobi City, Kenya.

1.4 The Study Value

This study is crucial to government, the retail supermarket sector, and scholars in providing understanding of the relationship between the firm financial distress and its characteristics. This study will build on the understanding of the Government which is the key policy maker by developing regulation and policy framework ensuring that retail supermarket firms will not face financial distress difficulties. The study will also help creditors (suppliers) analyze retail supermarkets' potential to reach their commitments and in case unable to develop plans to settle commitments as a result of bankruptcy. Auditors are a firm's watchdogs, acting as representatives of shareholders who have invested in retail supermarkets. The study will be of great help to scholars since it builds on the literature of the existing knowledge on financial distress in Kenya.

The study will likewise be important to the retail supermarket industry key players; namely financial institutions, creditors, and auditors since each have different motives toward the industry. The study will boost market trend reviews by investors, whose motives towards the market are different. Money lending financial institutions will need to assess the financial condition of retail supermarkets before to establish the ability to repay debt and also the default likelihood.

CHAPTER TWO

LITERATURE REVIEW

2.1Introduction

This segment contributes to the empirical and theoretical review on the financial distress. It lays weight on financial distress phases, previous research, and the research disparity. The literature reviews include both international and local research. The local researches were included to indicate financial distress within the selected retail supermarket chains in Nairobi city county, Kenya.

2.2 The Theoretical Review of Financial Distress

This segment examines the three theories which support the research objective: the effects of firm characteristics on financial distress.

2.2.1 The Operating Cycle Theory

This theory originated from John Weston and Richard Brigham (1979) study. This idea is founded on the operating cycle of firms. It supports that a growth in the capacity of the firm to realize is generated by growing the proportion of reliability in its potential to get net asset value so as to assimilate payment measures associated with its functional performance. According to Weston & Brigham, (1976), information on liquidity is given by incorporating records on inventory turnover and receivables in the operating cycle which is additionally relevant other than entirely looking at the dissolvability indicators. The sum total of times that ordinary receivables of a firm are converted into cash is

determined by computing the entire quantity of generated receivables. Extraordinary and ordinary debtors undergo a number of readjustments with regards to annual deals in case of reorganization to credit or when there is an accrual strategy.

Operating cycle results from adding inventory period to accounts receivable period. For the annual sales of the company, the average amount of receivables is influenced by change in collection and credit plans. The receivables will increase, with increased credit sales leading to a prolonged receivable collection period. This leads to moderate liquidity in the turnover of receivables. An inevitable choice that displays a higher proportion of present and basic review is generated as a consequence of results from a firm that chooses to have a higher ordinary receivable disclosure over a lengthy duration (Laughlin & Richards, 1980). The only limitation raised on operating cycle theory is its disregard to liquidity necessities imposed on a business. However, the theory relates to this study in its proposal that a deliberate liquidity administration can reduce financial tribulation increasing the final value of the company.

2.2.2 The Trade-off Theory

The research was connected to this theory submitted by Myers (1977). The basic belief of a firm's capital structure is that an optimal financing blend consists of establishing the supreme arrangement between the profits or losses and the debt financing that might result from debt financing. The theory also amplifies on Modigliani & Miller (1963) tagged along massive opinions raised against their irrelevance theory on optimal market presumptions account. In acknowledging that tax prevails in the actual world, break even undertakings are consistently unviable. According to writers, leverage

influenced the market valuation. Integrating the corporate tax impact and moderating the belief in the presence of break even, the authors claimed that debt interest yields additional cash flow to the levered company organized as interest tax savings in the process increasing market worth of the firm. Therefore, this theory is a fulfillment that in an event of static slight tax rate, permanent debt and a persisting cost of debt, leveraged firms' present value is more contrasted to the unlevered firms. This results from the interest tax shields present value of debt finance.

The theory will apply the models of Kraus & Litzenberg (1973) and Scott (1976) cost framework to determine the substantial debt level to inflate the distress cost. These factors comprise administrative and legal expenses in addition to the specified expenses such as losing the trust and confidence of the consumer resulting from market unpredictability. However, the acceptable opinion is that it is not possible to ascertain the bankruptcy cost in segregation because other several variables should be considered widely in benefit-cost debt examination (Poteshman, Ju, Weisbach & Parrino, 2005). Jensen & Meckling (1976), the framework of agency cost determination is too incorporated within trade-off representation. Trade-off theory offered transparency fora better perception in influences of debt financing on firm value by granting for verifiability of debt interest. This theory further grants the agency risks suggestion and how financial hardship on a firm may be increased by leverage since it builds on agency cost.

2.2.3 The Agency Theory

According to Jensen et al, (1976) an agent is any person who performs in the interests of another individual. As per Moenga (2015), the major drawback with agent- principal relation is that the principal cannot specify essentially what the agent is supposed to

achieve. Three aspects can aggravate the drawbacks that emerge from the agent-principal alliance: sunk costs, secrets and opportunism (Njau, 2016). Trade secrets occur when an agent has information which the principal lacks, holding all other factors responsible. Hidden knowledge allows the agent to reduce efforts to the principal's disadvantage. According to Aimone & Butera, (2016), agency theory has connections for why the best practices of corporate governance can provide competitive advantages and productivity benefits to organization. To ensure the activities of an agent are aimed at the interests of the principal there is need for sound corporate governance.

However, agency theory has deep-rooted limitations. This theory is not able to influence the many difficulties & complexities faced by agents in their aim to perform their assignments and responsibilities. Besides, the proposed control mechanisms for agency theory are economically ineffective and costly since interest of shareholders on the protection mechanisms may obstruct execution of strategic decisions, change investment plans, restrict joint activities and ignore the interests of the other shareholders, giving rise to moderation of their dedication to the growth of economic values, (Hatchuel & Segrestin, 2011).

The agency theory will be suitable to this study as it explains in what way firm leadership is required to attain its supreme trustee obligation of performing in favor of their principals and to prepare and offer financial reports to the principals. For that reason, agency theory will set out a strong conceptual background for the study objective: connection between financial distress and firm characteristics.

2.3 Factors Influencing Financial Distress of a Firm

Several variables lead to financial distress; these variables may relate to the firm either internally or externally. Certain internal firm variables may be controlled by management. These include firm characteristics namely firm size, liquidity, efficiency and leverage. External factors that might determine the financial distress are tax rates, corruption, political stability, regulatory environment and so forth (Athanasoglou, Delis & Bussimis, 2005).

2.3.1The Firm Size

A firm size according to Mule, Mukras & Nzioka (2015), is the diversity and quantity of the productive volume and ability held by a firm or else the quantity and variation of goods or services, it is required to provide to its customers. A company size forms an integral determinant of financial robustness of an organization as it indicates how big or modest, the firm is (Surajit & Saxena, 2009). To depict firm size, Mwangi et al (2014) & Kodongo et al (2014) empirical research used measures such as total assets logarithmic expression as well as total employees natural logarithmic. The usual neoclassical understanding of a firm and the economies of scale idea present a hypothetical foundation of debate that size of a firm is associated with financial distress of a company. Scale economies may arise due to buying of bulk quantity of goods. Large corporations can get better discount and interest rates, either organizationally: by using division and specialization of labour to minimize cost or technically: by dividing high expenditure amongst a substantial cluster, in so doing, bringing down the final expenditure, (Papadogonas, 2006).

2.3.2 The Firm Liquidity

According to Keraro, Orwa Cheluget, & Gekara, (2014) firm liquidity significantly determined financial distress and that there exists an association between the liquidity of insurance companies and financial distress. Firm solvency and liquidity signs had a significant impact on elevating cost efficiency; when solvency and liquidity are considered, firms with higher purchased input costs compared to the capital, (Arif, 2012). When solvency and liquidity indicators are accounted for, firms which allocate a high budget to purchased inputs equated with capital are unlikely to improve their own efficiency (Langemier, Russell & Levi, 2013). A company's liquidity equally called balance sheet liquidity is a proportion of the liquid assets maintained in its accounting books. When handling firms with a higher liquidity risk, the behavior of the corporate venture of family-owned firms has minimized financial hardship risk toleration, which is indicated by their significantly higher corporate liquidity degree (Liang Fu, 2016).

According to (Hoshi & Kashyap, 1991), the liquidity limitations of group companies compared to those of individual companies are weaker. For group firms, low liquidity does not automatically reflect a higher probability of failure. According to Patrick (2004), Liquidity is the distinct important cause for failure of small and newly formed firms; this is caused by insufficient sales revenue to cater for the production costs sustained. It is a matter of being able to pay for debts when they mature not generating enough money during a particular year to pay debts.

2.3.3 Management Efficiency

According to Olalere et al., (2015) management efficiency is the firm capacity to produce superior services and goods at the cheapest viable cost for its customers. Management

efficiency seems to support improved utilization of resources and higher competitiveness. In the literature about bank performance, management efficiency was measured by operational efficiency. Decision makers of a firm need to improve the overall profitability of the firm's physical assets (Saleh, 2005).

This discovery is in line with the views introduced by Manurung & Pranowo, (2010) whom claimed that evaluation of firm efficiency indicate how successfully the firm uses its undertakings and assets. In addition, operating ratios depict the firm efficiency which it markets its shares and the sum of cash it gets for each deal. Examples of operating ratios include; stock turnover, asset turnover, working capital to sales and debtor days.

2.3.4 Financial Leverage

Firms with higher leverage have a high potential of facing financial distress Khalid (2010). This instinct makes it fairly straightforward to ascertain the existence of an optimal leverage. Insufficient debt-scope prevails since firms consider the final expenses that may be incurred in the event of bankruptcy and benefits obtained in the form of reduced taxes (Krause & Litzenberg, 1973). According to Senbet (2012), if firm bankruptcy was costly, and then it satisfied an essential variance between Modigliani & Miller tax-modified model and the popular aspect that borrowing is only utilized a little portion of time.

The use of debt provides tax benefits for a firm, which is a portion of the trade-off hypothesis. According to Nyamboga, Omwario & Muriuki, (2014) increased volatility in price of shares result from significant leverage with a view to confidential information, although a firm's terminal fate depends on troubles that stay unrevealed to the public. A slight rise in taxation on the bondholders' return is equalized with a minor ideal debt

level; this increase in taxation gravitates to an ideal leverage, thus decreasing debt amount (Eckbo, 2008). Although the risk may be uncertain, under any circumstance unpredictability is regarded to be normally spread, the effect of risk is ambiguous. According to Cohn, (2008) volatility and debt ratio usually move side by side in an unfavorable manner.

According to Chirotou (2002), for new firms to obtain loans or financial help, they will have to present business plans to the banks. Success on this thus depends on effort and time set into these business goals. A firm is most likely to encounter financial distress if its plan is based on bad planning and poor information.

2.4 The Empirical Review

Various global and local studies have established the association between financial distress and firm characteristics. The methodology, objectives and the results of prior studies are discussed in this section.

2.4.1 Local Studies

Meeme (2015) endeavored to establish whether the financial strain condition of Kenyan commercial banks correlate with their compliance with the Basel III agreement. A census was used in secondary data collection over 2-year period for the entire Kenyan commercial banks; the study applied descriptive research methodology. Using multiple regression model, financial distress was revealed to be greatly related to the Basel III agreement. It was established that criteria like leverage and capital restrictions as well as liquidity needs showed an optimistic association with financial hardship by commercial Kenyan commercial. The research established that in Kenya, Basel III enjoyed a

remarkable influence on commercial banks' financial distress, and therefore to implement the Basel III agreement, strategies need to be designed by banks to aid in the implementation of standards required by the Basel III accord.

Taliani (2012), the study utilized financial ratios in predicting financial distress. Leverage ratios, profitability ratios, turnover ratios, and activity ratios were the independent variables. The study established that financial ratios determined the going concern of firms. The researcher applied secondary data from banks' annual financial statement. It established that turnover ratios and the activity ratios were not crucial in forecasting the financial distress of Kenyan commercial banks. It only relied on financial factors ignoring the non-financial factors. This was different from Altman (1968), who established that profitability and efficiency ratios are significant and liquidity ratios are insignificant.

Baimwera et al (2014) reviewed the causes of financial distress as suggested by Altman, (1968), for Nairobi Securities Exchange listed non-financial firms, which are growth, leverage, profitability and liquidity with regard to financial distress. To collect financial data from financial statements, descriptive research procedure was utilized for a period of three years lasting 2007-2010. So as to forecast financial distress, univariate and multivariate methods were applied. To analyze the character and influence of the relation connecting corporate financial hardship and drivers of financial distress, regression and correlation review of Pearson product moment regression and correlation review were carried out. The corporate financial distress lacks substantial influence on leverage and liquidity but profitability and growth have no major influence.

Warutere, (2013) researched on application of logistic regression to predict the financial distress on Nairobi Security Exchange (NSE) listed firms. The research was carried out on sixteen (16) firms during the period 1997 and 2011. The study results disclosed that

logistic regression successfully predicted business collapse a year before it happened. The study ignored other factors within the regression model suchas corporate governance that cause financial distress and which could make it more reliable.

Kariuki (2013) ascertained how financial distress affected the financial performance of Kenyan commercialized banks. The researcher sampled a total of 44 banks so as to come up with 22 banks. These 22 banks included eleven listed and eleven unlisted. Statistics were acquired from appraisals of Kenya's Central Bank and banks' financial statements. To assess financial performance, the ratio of return on assets was applied and so as to calculate financial distress, an Altman Z-score model of manufacturing firms whose assets value is above $1M was employed. The study showed that, as opposed to banks, which went public, banks which failed to go public encountered increase in financial difficulty. The research further established that there existed correlation linking financial hardship and financial capability.

Memba & Abuga (2013) conducted research on the effect and causes of financial distress on firms. It demonstrated that financial distress was caused by improper capital decisions, poor accounting records, poor internal controls and inadequate capital. External causes of financial distress are large debts, import duties, competition, large legal costs, government policies on taxation, and huge borrowings.

2.4.2 Global Studies

Amato & Burson (2017) examined the profit and firm size in the finance service industry of UK. The size of a firm had an unfavorable consequence on profitability irrespective whether a cubic or linear relationship was used in modeling. As firms enlarged, their debt-leverage of the firm increased, compared to their small-sized peers followed by a decrease in profitability and

efficiency.

In a study conducted in the Ghana mobile Telkom industry to test bankruptcy and financial distress prediction, Kpodoh (2010) utilized a Z-score bankruptcy prediction model. Using questionnaires in the survey method, both the quantitative and the qualitative data were collected for the research. Study findings revealed the sufficiency of Z-score in forecasting bankruptcy and its correlation with corporate governance. The study excluded uncontrollable factors concentrating on corporate governance and ratios. Uncontrollable factors indirectly affect characteristics of a firm provoking financial distress.

Hamid & Nasil (2014), conducted research on all listed manufacturing firms in Karachi Stock Exchange; Pakistan from July 2003 to June 2010 to analyze the extent of distress on the listed companies, the study used the Zmijewski model. The results were that probit model operated well in predicting both the non-distressed firms and those experiencing financial distress based on shareholders' equity, net income and cash flows. However, the study ignored the other factors leading to the financial distress and depended mostly on ratios.

Tan (2012) carried out a comprehensive research on business performance and financial hardship data concerning the Asian financial crisis. From 8 East Asian countries, a sample of 277 firms was examined to learn the link between financial distress and business achievement. Subsequently, due to this crisis, there were reduced endogenous issues, giving rise to a non-endogenous distress. The study findings were: first, firms with lower financial leverage showed a superior performance compared to organizations with higher leverage; second, financial hardships resulted in improved standards of firms functioning subsequent to the 1997-1998 Asian Financial Crisis. As per research, leveraged organizations amid a crisis have poorer financial results. Since the results of this research are founded on the Asian Financial crisis, they are inapplicable to the Kenyan economy.

Lee (2019) examined the association between profitability and company size of the United States publicly traded firms. So as to ensure valid results, the study applied predetermined effect on dynamic panel data and larger than 7000 firms' sample. This revealed that total assets which are the entire firm size had a considerable nonlinear association with the measures of profitability; denoting that for large firms increase in their profitability was modest. Since bigger companies had higher ability of borrowing, the results showed that they financed their assets with substantial borrowed capital amounts.

Bothwell (2010) carried out a study to assess South Africa's corporate financial distress to develop and investigate a bankruptcy-predicting model. 28 companies were used and classified into successful and failed firms. Working capital to turnover and cash to debt were the independent variables used. The results disclosed that the model accurately classified about 75 percent of failed firms and successful firms. The research used multiple discriminant analysis and an easy random sampling technique. This research too ignored other factors which contribute to financial distress and relied on ratios.

Pratheepkanth (2011) researched 210 publicly listed Sri-Lankan companies on Colombo stock exchange in an attempt to demonstrate how the financial distress of firms was influenced by leverage, stretching across a five-year period (2005-2009). During the research, to acquire leverage a firm's sum of capital was divided by its sum of debt as well as dividing its equity by its debt. Both the net income margins and the gross income were used as financial difficulty evaluators. This research established that the main study parameters had a weak inverse relationship. The study finding was that increased use of debt decreased the firm's productivity level, but only to a minor scope.

2.5 Conceptual Framework

To demonstrate the association predicted between study variables namely firm liquidity, firm size, management efficiency, financial leverage and financial distress was presented by Figure 2.1. According to Mugenda & Mugenda (2003), the conceptual framework permits the reader to get a snapshot and a clear comprehension of what the study is trying to establish. In this study, dependent variable under investigation isfinancial distress and was stated by Altmans Z-Score index. Independent study factors were financial leverage, management efficiency, firm size and firm liquidity. This is demonstrated in the framework below.

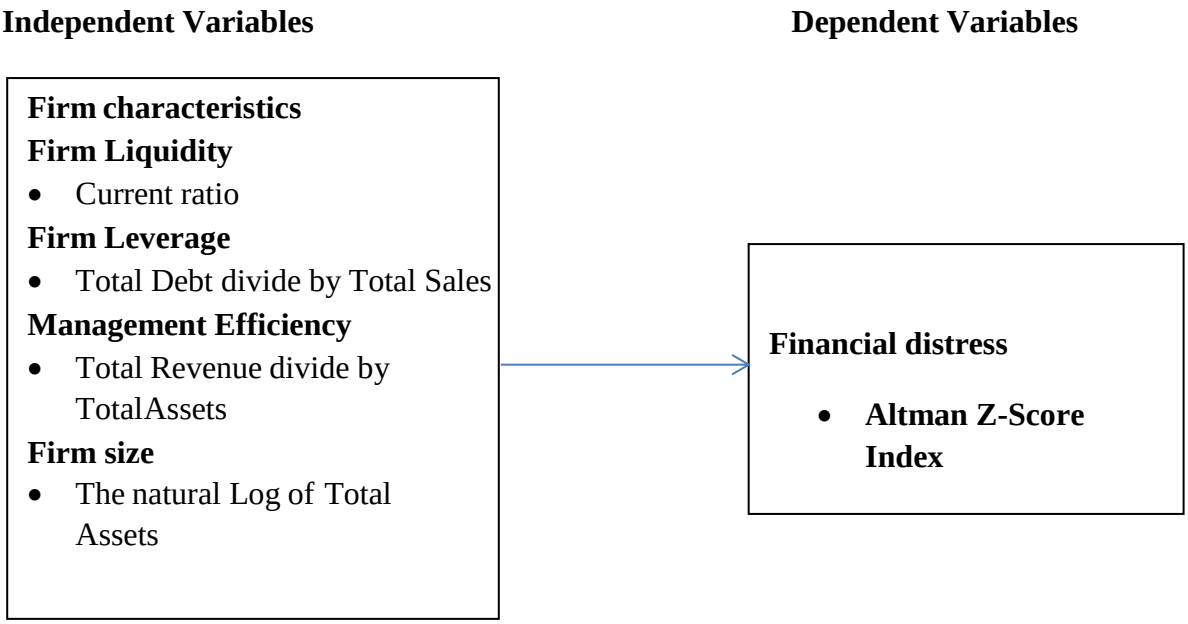

Figure 2.1 : The Conceptual Framework

Source: Researcher (2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the study methodology which was adopted in research. The chapter covers research design, data collection, target population, sample design, data analysis, operationalization, and computation of variables involved with the research.

3.2 The Study Design

Study design is a structured framework defining methodology and approach for carrying out a study on a particular topic, Kombo & Tromp (2006). As per Kothari (2003), a research design is a layout of specific state of affairs for collecting and analysis of data. The study design is conducted in such a way that targets combining significance of the research with the economy in technique. It outlines coursesof action to be adopted by the scholar during data analysis. To address the research problem identified in chapter one, a descriptive study design was used todemonstrate the effects of firm characteristics on the financial distress of selected retail supermarket chains in Nairobi city county, Kenya. This design gave sufficient response to the study question since it accurately and validly represents the variables.

3.3 Target Population

Target population can be described as a group of items with similar features. As per Mugenda & Mugenda (2003), a target population ought to have observable aspects from which researcher plan to derive study results. Target population of this research involved the nine (9) selected retail supermarket chains in Nairobi city county, Kenya. The

criterion on these retail supermarkets is that some have been shut up, others are growing and others have slowed operations.

3.4. Data Collection

This research applied data from secondary sources. This information was acquired from published yearly financial reports of nine selected retail supermarkets and was recorded in the schedule of secondary data collection. The specific data collected included total assets, current liabilities, total debt, current assets and total revenue.

3.5 Data Analysis

For data analysis, the SPSS software was applied. Descriptive statistics were used to calculate mean, standard deviation, dispersion and central tendency measurements. Karl Pearson Product-Moment Correlation and Regression formed the basis for inferential statistics. Regression determined the cause and effect of study variables. The connection between the independent variables and the dependent variable was ascertained linearly using a multiple linear regression.

3.5.1 The Analytical Model

The equation below was applied:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where the variables were identified as follows;

Y = Was the Financial Distress as identified by the Altman Z-Score Index

Below is the model used;

$Z = 0.179 - 0.461X_1 - 0.346X_2 - 0.554X_3 - 0.348X_4$

$\mathbf{X_1}$ = Dividing current assets by current liabilities

$\mathbf{X_2}$ = Dividing total debt by total assets

$\mathbf{X_3}$ = Dividing total revenue by total assets

$\mathbf{X_4}$ = as given by logarithmic expression of the sum of all assets

$\boldsymbol{\beta_0}$ = is the y value when all other variables are at zero (slope)

$\boldsymbol{\beta_1}$.....$\boldsymbol{\beta_4}$, = are regression coefficients of the predictor variables

$\boldsymbol{\varepsilon}$ is the error term.

This model was previously applied by Begley & Ming (2007)

3.5.2 Test of Significance

To illustrate relevance of the model and also the significance of the specific coefficients parametric tests were used. With the use of ANOVA, the F-test ascertained the significance of the general model. The value of all variables was ascertained using the T-test.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter unveils the data prepared from the information gathered during the research on the effects of firm characteristics on the financial distress of selected retail supermarket chains in the Nairobi City County, Kenya. The time span that the research covered was 5 years, (2018-2022).

4.2 Descriptive Statistics

Table 4.1: Firm Liquidity

Years	Min	Max	Mean	Std Dev
2018	.374	.772	.639	.221
2019	.712	.851	.846	.261
2020	.323	.425	.433	.243
2021	.542	.691	.641	.265
2022	.599	.731	.722	.231

Source: Research findings (2023)

In overview, year 2020 registered the least value for supermarkets' liquidity at 0.433, and on the other side year 2019 registered the greatest estimate for supermarkets' liquidity levels at 0.846. Additionally, standard deviation estimates show variance in value for supermarkets' liquidity ratio during the 5-year duration, the greatest deviation was at 0.265 for year 2021 and the least was 0.221 for year 2018.

Table 4.2: Leverage

Years	Min	Max	Mean	Std Dev
2018	.164	.562	.429	.011
2019	.502	.641	.636	.051
2020	.113	.215	.223	.033
2021	.332	.481	.431	.055
2022	.389	.521	.512	.021

Source: Research findings (2023)

In overview, year 2020 registered the least value for supermarkets' leverage ratio at 0.223 while year 2019 registered the greatest value at 0.636. Additionally, the values of standard deviation depicted a variance in value of the supermarkets' leverage ratio during the 5-year period where the greatest deviation was 0.055 for the year 2021 and the least was 0.011 for the year 2018. The results established a remarkable rise in supermarkets' leverage ratio.

Table 4.3: Management Efficiency

	Min	Max	Mean	Std. Dev.
2018	.123	.144	.121	.114
2019	.102	.441	.334	.367
2020	.105	.117	.112	.170
2021	.142	.211	.225	.133
2022	.410	0.712	.682	.182

Source: Research findings (2023)

In overview, year 2020 registered the least value for supermarket management efficiency of 0.112, and year 2022 registered the greatest value of 0.682. Additionally, the values for standard deviation showed a variance in the value for supermarket management efficiency over a 5-year period, where the greatest deviation was at 0.367 for year 2019 and the least was at 0.114 for year 2018. The results established a remarkable rise of supermarkets' management efficiency between the years 2018 and 2019 before declining sharply in 2020 and picking up in the years 2021 and 2022 respectively.

Table 4.4: Firm Size

Years	Min	Max	Mean	Std. Dev.
2018	.0561	.0581	.0443	.073
2019	.0593	.0714	.0631	.112
2020	.0137	.0446	.0367	.217
2021	.0401	.0559	.0541	.323
2022	.0663	.0869	.0757	.128

Source: Research findings (2023)

From the overview, the year 2020 registered the least mean value for the firm size at 0.0367. On the other side, year 2022 registered the greatest estimate for the firm size of 0.0757. Additionally, estimates for the stardard deviation indicates a variance in the value for firms' size over the 5-year period with the greatest deviation of 0.323 for year 2021 and the least at 0.073 for year 2018, the results established a remarkable rise in the firm size over the first two years before facing a stiff decline in the third year (2020), before later picking up in Subsequent years.

Table 4.5: Financial Distress

Years	Mean	Std. Dev.
2018	1.2135	0.325
2019	1.6215	0.015
2020	1.8695	0.418
2021	1.3254	0.966
2022	1.0758	0.112

Source: Research findings (2023)

The majority of the businesses recorded the highest financial distress Z-score mean value in 2020 (1.8695), while the lowest value was reported in 2022 (1.0758). Results show a decreasing trend in financial distress by supermarkets' from 2020 to 2022.

4.3 Inferential Statistics

4.3.1 Correlation Analysis

The association between the independent and dependent factors was examined using the product-moment correlation method developed by Karl Pearson. The dominance of linear link between the two factors is measured by the Pearson's product-moment correlation coefficient or r. It can vary from +1 to -1. If r=0, there is no correlation between the two variables. When r>0 implies a positive association, signifying that as value of one variable increases, the other's value also increases. When r<0 it signifies a negative association, implying that as the value of one variable value increases, the other's value decreases. It was done using Coefficient of Pearson's Correlation, and the outcomes are as shown in table 4.6.

Table 4. 6: Correlations

		Financial distress Y	Firm Liquidity X_1	Financial Leverage X_2	Management Efficiency X_3	Firm Size X_4
Financial Distress Y	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	45				
Firm Liquidity X_1	Pearson Correlation	-.341*	1			
	Sig. (2-tailed)	.022				
	N	45	45			
Financial Leverage X_2	Pearson Correlation	-.325*	.155	1		
	Sig. (2-tailed)	.029	.310			
	N	45	45	45		
Management Efficiency X_3	Pearson Correlation	-.277	-.150	-.110	1	
	Sig. (2-tailed)	.066	.325	.473		
	N	45	45	45	45	
Firm Size X_4	Pearson Correlation	-.229	-.219	.001	.091	1
	Sig. (2-tailed)	.131	.148	.994	.551	
	N	45	45	45	45	45

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

The research results in the table 4.6 shows a remarkably negative association between firm liquidity and financial distress of selected retail supermarket chains in Nairobi city county (r = -0.341* sig. = .022). A weak negative correlation also exist between financial leverage and financial distress of selected retail supermarket chains (r = - 0.325* Sig. = 0.029). However the study findings shows a strong and insignificant correlation between management efficiency and financial distress (r = -0.277 Sig. = 0.66). The study findings also shows a weak and insignificant correlation between supermarkets' financial distress (r = -0.229, Sig. = 0.131).

4.3.2 Regression Test

In this research, a multiple regression analysis was carried out to check the impact among independent variables. The study utilized the Statistical Package for Social Sciences (SPSS V 21.0) to code, record and evaluate the estimations of multiple regressions. The model overview are demonstrated in the below table 4.7

Table 4.7: The Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631[a]	.398	.338	.03587

Source: Research data, (2023)

The model had an average adjusted coefficient of determination (R^2) of 0.338 and which implied that 33.8% of the variations on financial distress of selected retail supermarket chains in the Nairobi City County are expounded by the predictor variables under study (firm liquidity, financial leverage, management efficiency & firm size).

Through the use of ANOVA, the study evaluated the significance of the model. In table 4.8 below, the findings are summarized.

Table 4.8: Summary of the One-Way ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.034	4	.009	6.614	.000[b]
	Residual	.051	40	.001		
	Total	.086	44			

Source: Research data, (2023)

Critical value = 2.52

The study determined from the ANOVA statistics that the regression model of the study had significance level of 0.00%, implying that the information was suitable for drawing an opinion on the population variables because the significance value (p-value) was below 5%. The computed F value exceeded the crucial threshold (6.14 > 2.52), demonstrating that company liquidity, financial leverage, managerial effectiveness, and firm size all significantly affect the financial distress of particular retail supermarket chains in Nairobi City County. Given that the value of significance was below 0.05, this model was significant.

Additionally, the research utilized the coefficient table to decide the model of the study. The results are showed in the table 4.9 below.

Table 4.9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.179	.072		-2.468	.018
	Firm Liquidity	-.461	.144	-.410	-3.195	.003
	Financial Leverage	-.346	.144	-.299	-2.398	.021
	Management Efficiency	-.554	.201	-.345	-2.762	.009
	Firm Size	-.348	.153	-.287	-2.274	.028

Source: Research data, (2023)

As per the SPSS generated output as presented in table above,

The equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:

$\mathbf{Y = 0.179 - 0.461 X_1 - 0.346 X_2 - 0.554 X_3 - 0.348 X_4}$

Where

Y= financial distress

$\mathbf{X_1}$ - Firm Liquidity

$\mathbf{X_2}$ - Financial Leverage

$\mathbf{X_3}$ - Management Efficiency

$\mathbf{X_4}$ - Firm Size

According to the regression model developed above, a unit change in firm liquidity would result in a decrease in financial distress of selected retail supermarket chains in the Nairobi City County by -0.461 factor. This study concurs with the study findings by Orwa Cheluget, and Gekara, (2014) that there exists association between liquidity of insurance companies and financial distress.

The research established that a value change of financial leverage, holding other variables fixed,

will change financial distress of selected retail supermarket chains in Nairobi City County by -0.346 factor, unit change in management efficiency while holding other factors fixed would reduce financial distress of selected retail supermarket chains in Nairobi City County by -0.554 factor while unit change in enhancement on firm size, holding the other variables fixed, will definitely reduce financial distress of selected retail supermarket chains within Nairobi City County at a value of - 0.348.

The research was carried out at 5% level of significance. The basis for contrasting whether the independent factors were crucial to the model was by contrasting the acquired probability value and $\alpha = 0.05$. In the event that the probability value was below α, then the independent factor was crucial, if not, it was not. All the independent factor were crucial in the model as their probability values were below $\alpha = 0.05$

4.4 Discussions

In line with the study objective, test regression results also affirm that a unit change in firm liquidity while holding other factors constant would decrease the financial distress of selected retail supermarket chains in Nairobi City County by a factor of -0.461. Descriptive results show that year 2020 registered the least value for supermarkets' liquidity at 0.433. On the other side, year 2019 registered the greatest value for supermarkets' liquidity levels at 0.846. Further, adequate liquidity can act as a buffer for retail supermarkets against financial distress. These results confirm the research augmented by Liang Fu (2016) that high liquidity reduces the risk of short-term financial distress by ensuring that the company can meet its immediate obligations. It also provides a safety net during economic downturns.

Results show that retail supermarket chains with strong liquidity positions are better prepared to handle unexpected challenges, such as economic downturns, supply chain disruptions, or changes

in consumer behavior. These findings go along with research evidence by Patrick (2004) that effective financial management and strategic decisions made by the supermarket chain's management play a significant role; thus, prudent financial planning, budgeting, and risk management can help maintain liquidity and mitigate the risk of financial distress.

Test regression results predict that, a unit increase in financial leverage while holding the other factors constant would change the financial distress of selected retail supermarket chains in the Nairobi City County by -0.346 factor. According to descriptive findings, a retail supermarket chain can lessen the risk of financial difficulty by reducing its financial leverage by repaying debt or refraining from taking on new debt. According to Nyamboga, Omwario, and Muriuki (2014), lower leverage means lower interest expenses, which can improve the company's cash flow and financial stability.

Descriptive statistics also show that year 2020 registered the least value for supermarkets' leverage ratio at 0.223. On the other side, year 2019 registered the greatest value for supermarkets' leverage ratio at 0.636. The results established a remarkable increase in supermarkets' leverage ratio OVER the years 2022 and 2021. Reports show that when revenue and cash flow decline, highly leveraged retail supermarkets struggled to make debt payments, thus leading to default or bankruptcy. These findings support study conclusion by Cohn, (2008) that high leverage levels make a company more susceptible to insolvency in cases of declining profitability or adverse economic conditions.

Results further show that, appropriate level of leverage depends on a company's industry, risk tolerance, and financial objectives. Highly leveraged companies may divert a significant portion of their cash flow to debt servicing, limiting their ability to invest in their operations, pursue growth opportunities, or weather unexpected setbacks, this operational constraint can increase the risk of financial distress. These results concur with study deduction Chirotou (2002) that companies need to carefully manage their leverage while also addressing other operational and market-related

challenges to maintain financial stability and avoid distress.

In check with the research objective, this research finds that, a unit variance in management efficiency, holding the other factors fixed, would decrease the financial distress of selected retail supermarket chains in the Nairobi City County by (- 0.554) factor. Descriptive results portray that careful financial management and risk assessment are essential for all retail supermarket chains, regardless of their size, to minimize the risk of financial distress. These results concur with study deduction by Olalere et al., (2015) that effective management is essential for maintaining financial stability and mitigating distress risk.

Results establish that management efficiency remarkably impacts the financial distress of retail supermarket chains in Nairobi or any location, efficient management practices help mitigate the risk of financial distress, while poor management can exacerbate it and that supermarket chains that responded quickly to shifts in the market are more likely to maintain revenue streams and profitability, reducing the risk of financial distress during market disruptions. This discovery is in line with the views introduced by Manurung and Pranowo, (2010) that prudent financial management and risk assessment are essential to maintaining adequate fiscal stability.

Further the study revealed that efficient working capital management ensures the retail supermarket chains have the necessary cash flow to fulfil their short term commitments, reducing the likelihood of financial distress and that stronger market position and revenue growth can provide a financial cushion, reducing the likelihood of financial Distress. These results concur with study deduction by Changqing, Xie and Xiang (2011) that effective management practices can help these chains optimize their operations, control costs, and adapt to market dynamics, reducing the likelihood of financial distress and enhancing long-term sustainability. Conversely, poor management practices can increase the risk of financial distress by undermining profitability and

liquidity.

Test regression results indicate that unit variance in enhancement on firm size, holding other factors constant, will certainly reduce financial distress of selected retail supermarket chains in the Nairobi City County by (-0.348) factor. The descriptive results demonstrate that retail supermarket chains may profit from economies of scale, which may result in lower costs for purchasing, marketing and distribution, This could potentially reduce the risk of financial distress by allowing larger chains to operate more efficiently and maintain healthy profit margins. The conclusions are consistent with work by Kodongo et al. (2014), who discovered a powerful positive association linking firm size and financial difficulty.

The relationship between firm size and financial distress is influenced by a combination of internal and external factors, and it can vary from one supermarket chain to another based on their unique circumstances and strategies. As per the findings, year 2020 registered the least mean value of firm size at a 0.0541. On the other side, year 2022 registered the greatest value of firm size at a 0.0757. The results showed a remarkable rise in the firm size over the first two years before facing a stiff decline in the third year (2020), before later picking up in subsequent years.

Larger retail supermarket chains in Nairobi City County often have a more diverse customer base and product offering. This diversification can help mitigate the impact of localized economic downturns or shifts in consumer preferences. Smaller chains, on the other hand, may be more vulnerable to such changes, increasing their risk of financial distress. Smaller chains might find it harder to get funding, while larger businesses may have superior access to capital markets, making it simpler for them to raise money when they need it. According to Papadogonas (2006), this can provide a financial cushion during challenging times, reducing the likelihood of financial distress.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The key results on impact of company characteristics on financial distress of particular retail supermarket chains in Nairobi City County are summarized, concluded, and suggested in this chapter. The topic in this chapter is derived from the information results that were examined and submitted in Chapter 4. Secondary sources, such as published reports, were applied in the research. The chapter is split up into discussions, conclusions, limitations, recommendations suggestions for additional research.

5.2 Summary of Findings

5.2.1 Liquidity Levels

Inferential statistics find that liquidity levels are a significant predictor of the financial distress of retail supermarket chains in Nairobi City County. Adequate liquidity can help retail supermarket chains avoid or mitigate financial distress. Descriptive research finds that retail supermarket chains that have sufficient cash reserves can handle unexpected expenses, economic downturns, or other disruptions more effectively. For instance, if there's a sudden decline in customer traffic due to external factors (e.g., a pandemic or economic recession), having liquidity can help the chain cover operational costs and remain solvent. The findings support a similar research deduction by Liang Fu (2016) that high liquidity reduces the risk of short-term financial distress by ensuring that the company can meet its immediate obligations. It also provides a safety net during economic downturns.

Conversely, poor liquidity management can increase the risk of financial distress. If retail supermarket chains are unable to generate enough cash flow or have limited access to credit, they might struggle to cover their immediate financial obligations. This could lead to missed payments to suppliers, employees, or lenders, which in turn could damage the chain's reputation, result in legal action, or trigger a downward spiral of financial distress. The findings contradict the research assumption by Patrick (2004) that effective financial management and strategic decisions made by the supermarket chain's management play a significant role; thus, prudent financial planning, budgeting, and risk management can help maintain liquidity and mitigate the risk of financial distress.

5.2.2 Leverage

Assessment of the relationship between leverage levels and financial distress revealed mixed results; for instance, results show that retail supermarket chains with soaring levels of debt compared to their equity they are more susceptible to financial distress. If a supermarket chain has high operating leverage due to substantial fixed costs, a decrease in sales can lead to reduced profits or losses. The findings tally with the views of Nyamboga, Omwario, and Muriuki (2014) that high leverage can limit a company's ability to adapt to changing market conditions and invest in innovation or necessary improvements, increasing the risk of financial distress.

It was established that retail supermarket chains with a moderate and well-balanced mix of equity and debt financing are better positioned to manage financial distress. These retail supermarkets have the flexibility to meet debt obligations and operational costs without being overly burdened by interest payments. These findings concur with the study deduction by Nyamboga, Omwario, and Muriuki (2014) that a moderate leverage approach can provide better cash flow resilience during economic downturns, enabling the company to navigate challenges without being overwhelmed by debt payments.

5.2.3 Management Efficiency

The study finds that management efficiency and financial distress for retail supermarket chains in Nairobi are interconnected and impactful. Results suggest that efficient management practices enhance a retail supermarket's ability to withstand challenging economic conditions or unexpected disruptions. Similarly, effective cost management, streamlined operations, and optimal inventory control contribute to maintaining healthy cash flow and profitability, reducing the risk of financial distress during tough times. These findings correspond with the research evidence by Olalere et al. (2015) that effective management of working capital components (such as accounts receivable, accounts payable, and inventory) is crucial for maintaining liquidity and financial stability.

Descriptive evidence suggests that well-managed retail supermarkets focus on providing excellent customer service, a wide range of quality products, and a pleasant shopping experience. This fosters customer loyalty, repeat business, and positive word-of-mouth marketing. Strong customer relationships can help the supermarket maintain consistent sales and revenue streams, which are essential for avoiding financial distress. These research findings go hand in hand with the research evidence by Manurung and Pranowo (2010): Well-managed retail supermarkets optimize their cash conversion cycle, ensuring that cash is available to cover operational expenses and debt obligations, thus mitigating the risk of financial distress.

The findings revealed a significant increase in supermarkets' management efficiency between the years 2018 and 2019, before declining sharply in 2020 and picking up in 2021 and 2022, respectively. Efficient management at this time allows retail supermarket chains to quickly respond to changes in consumer preferences, market trends, and competitive dynamics. This adaptability enables them to make timely strategic decisions, introduce new products, adjust pricing, and optimize their product mix, reducing the likelihood of financial distress caused by being outpaced by market shifts.

5.2.4 Firm Size

Results establish that larger retail supermarket chains benefit from economies of scale, which means that they can outspread their indirect costs over a larger volume of sales. This can lead to cost savings, improved profitability, and enhanced resilience against financial distress. Larger chains have more negotiating power with suppliers, better access to credit, and the ability to invest in technology and efficiencies that smaller chains might struggle to afford. These findings concur with the study deduction by Kodongo et al. (2014) that larger retail chains may find it easier to access capital markets, secure financing, and attract investment.

Qualitative information suggests that larger retail supermarket chains often have a broader geographic presence and a more diversified customer base. This diversification can help mitigate the impact of localized economic challenges, changing consumer preferences, or competitive pressures. It reduces reliance on a single market and can contribute to a lower risk of financial distress. These contradict the study deduction by Papadogonas (2006), who postulates that although larger size can offer advantages, it also introduces complexity in terms of management, coordination, and decision-making. In his view, inefficient management of a large operation can lead to higher costs, operational inefficiencies, and an increased risk of financial distress.

5.3 Conclusion

Drawing from the results presented in the examination, the study wind up that, the association linking financial distress and liquidity for retail supermarket chains is intertwined. Adequate liquidity provides a buffer against financial distress, while poor liquidity management can increase the risk of facing financial difficulties. Proper financial planning, efficient working capital management, and contingency strategies are essential for retail supermarket chains to maintain a healthy balance linking liquidity and avoiding financial distress.

Further, the research concludes that retail supermarket chains in Nairobi experienced financial

distress in the years 2020 and 2021. During this period, a considerable number were unable to meet their financial obligations, which consequently led to a range of negative outcomes, including bankruptcy, insolvency, or the need to restructure debt. In most of this retail supermarket, financial distress was caused by a variety of factors, including declining revenues, excessive debt burden, economic downturns, and poor management decisions.

The study winds up that efficient management practices perform a significant part in preventing financial distress. Strong management practices contribute to operational resilience, customer loyalty, adaptability, and effective financial management, all of which collectively help retail supermarkets navigate challenges and reduce the likelihood of financial distress.

The study concludes that larger chains enjoy access to resources that provide a buffer against financial distress, enabling the chain to fund its operations, expansion, and debt obligations more effectively. Retail supermarkets are often more established and have a recognizable brand, which can lead to greater customer trust and loyalty. This helps them weather temporary setbacks in times of economic uncertainty, reducing the risk of financial distress caused by abrupt drops in sales.

5.4 The Study Limitations

Several obstacles were faced by the researcher when conducting the study, most notably when gathering the data. The researcher had to work within budgetary limits because of the insufficient resources available.

Creating a model that will allow the researcher to examine the relationships linking the several factors was another limitation. It was important to establish both independent and dependent factors when generating the model. The research procedure would not have produced the preferred interpretations if the model had been inaccurate. Since there were several factors that needed to be examined, multiple linear regressions were performed in this instance.

While studying part-time and also working full-time, and the study time allotted was insufficient.

This came up when gathering information and statistics to assess the effectiveness of the research. Nevertheless, the researcher made an effort to complete the investigation within the allotted time.

5.5 Recommendation

The recommendations made in this research are built on the study outcomes:

Retail supermarket chains in Nairobi City need to effectively manage their working capital to ensure they have enough liquidity to cover short-term and long-term obligations. Incompetent management of working capital, like holding too much inventory or stretching overly generous credit terms to clients, can tie up cash and potentially lead to financial distress.

Given that the correlation between leverage and financial distress of retail supermarket chains was found to be influenced by the levels of debt, operating leverage, market dynamics, and overall financial management, striking the right balance between debt and equity financing is crucial for retail supermarket chains in Nairobi City County to effectively manage financial distress risks and maintain a stable financial position.

In order for retail supermarket chains in Nairobi City County to navigate challenges and lower the likelihood of financial distress. It is important to adopt strong management practices in strategic planning, cost control, inventory management, human resource management, customer service, and overall decision-making. Such practices will contribute to operational resilience, customer loyalty, adaptability, and effective financial management.

Both larger and smaller chains need to adapt to remain competitive. Effective management, diversification, access to resources, and sound risk management strategies are essential for both large and small firms to navigate the potential pitfalls of financial distress.

5.6 Recommendations for further studies

The goal of the study was to ascertain the effect of firm characteristics on the financial distress of selected retail supermarket chains in the Nairobi City County, Kenya. The research variables included firm liquidity, financial leverage, management efficiency, and firm size; however, there are other factors that affect financial distress. In order to fully understand the factors that affect the financial distress of selected retail supermarket chains, it is recommended that future studies include more variables.

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Appendix I: List of Retail supermarket Chains in Nairobi City County Used in Analysis

1. Uchumi Supermarket
2. Mathais Supermarket
3. Carrefour
4. Game Stores
5. Village Supermarket
6. Eastmatt Supermarket
7. Chandarana Foodplus Supermarket
8. Quickmart Limited
9. Naivas Limited