

Financial Risk and Financial Distress of Listed Manufacturing Firms in Nairobi Securities Exchange, Kenya

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Abstract:

Kenya's publicly listed manufacturing entities are gradually facing imminent demise because of financial distress. Many of these financially distressed listed manufacturing firms are increasingly petitioning the exchequer for bailout, citing their strategic national importance. Kenya has experienced a fair share of listed manufacturing companies facing financial distress; notable examples are Eveready Company, East Africa Packaging, Sameer Africa, Mumias sugar, Athi River Mining, East Africa Portland Cement, and the East Africa Cables. Several firms in Kenya have been delisted from NSE due to liquidity and financial health. The delisted firms include Mumias Sugar Company and East Africa Packaging. This study sought to determine the influence of financial risk on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya. The specific objectives were to determine the influence of financial leverage risk on financial distress among listed manufacturing firms, influence of operational risk on financial distress among listed manufacturing firms and influence of liquidity risk on financial distress of listed manufacturing firms at Nairobi Securities Exchange. The study was guided by pecking order theory, trade off theory, cash management theory and liquidity preference theory. Explanatory research design was used in this study. Eight (8) listed manufacturing firms at Nairobi Securities Exchange were targeted. The sampling frame comprised of listed manufacturing firms at Nairobi Securities Exchange. The used census sampling technique to select 8 listed manufacturing firms. The study utilized secondary data collected between 2016 and 2020. Quantitative data was analyzed using descriptive and inferential statistics. Descriptive analysis summarized data in form of central tendency as well as dispersion and inferential analysis was used to test hypotheses. Descriptive analysis included Mean, maximum, minimum, standard error, Standard deviation while inferential analysis involved correlation analysis and multiple linear regression analysis specifically random effect with aid of STATA version 15. From Hausman test, the study utilized random effect. Analysis of financial distress between 2016 and 2020 indicated that three out of eight listed firms were classified as distress. The overall Altman Z-Score which was used to measure financial distress indicated listed manufacturing firms are classified as distress. The random effect multiple linear regression revealed that financial leverage risk, operational risk and liquidity risk have significant positive influence on financial distress. The study concluded that financial risk influence financial distress therefore, increase in financial risk would results to increase in financial risk. Therefore, the study recommended that management of listed firm should come up with robust practices to mitigate financial risks. The study recommended that managers of listed manufacturing firms should lower the proportion of operating fixed cost in relation to operating variable cost. Further, listed manufacturing firms should avoid holding too much liquid assets as highly liquid assets are associated with lower returns than risky assets. Lastly, managers of listed manufacturing firms should have financial early warning systems to monitor various activities in the market so that they can take appropriate proactive measures.

Key Word: Financial Risk, Financial Distress of Listed, Manufacturing Firms, Nairobi Securities Exchange, Liquidity risk, financial leverage risk and operational risk

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I. Introduction

Corporate financial distress has been a persistent feature of the business environment for many years. There have been countless incidents of collapse among internationally renowned companies in recent years, which has shocked the globe. Researchers and experts were taken completely by surprise when these firms went bankrupt. They were considered as emblems of corporate financial stability, therefore their demise came as a complete shock. Several service sector firms in Kenya have faced financial difficulties and are on the brink of going bankrupt, according to the International Financial Reporting Standards (IFRS) (Nurhayati, Mufidah &

Kholidah, 2017). The term "financial distress" refers to the situation in which a corporation collapses or is unable to meet its financial commitments to creditors due to a lack of available finances. Because of this negative situation, the total liabilities exceed the total assets, and the corporation is unable to meet its economic objectives of making a profit. Financial hardship happens when a corporation is unable to manage and sustain the stability of its financial performance over an extended period of time. It is a result of the company's inability to advertise its goods. As a consequence, it has a negative impact on the value of sales (Jaafar, Muhamat & Karim, 2018). As a consequence of diminishing sales, operating earnings are dropping, resulting in a net loss for the year. Losses suffered as a result of capital deficit are caused by the reduction in retained earnings values, resulting in a deficiency in the overall equity of the company. If this continues to be the case, the entire liabilities of the corporation will surpass the total assets possessed by the organization. If a company is unable to take necessary action, this circumstance will result in financial difficulty, which will finally result in the company going bankrupt.

According to Yazdanfar and Ahma (2020), as a result of financial difficulty, managers, investors, lenders, and workers are always worried about the financial health of their respective organizations. Should their companies have financial difficulties, the job security of managers and staff is in jeopardy. The equity position of stockholders and the claims of lenders are likewise not guaranteed. When it comes to the effects of financial crisis for businesses, the government, as a regulator in a competitive market, is concerned, and it supervises capital adequacy via the regulatory capital requirement (Dirman, 2020). This common interest among managers, workers, investors, and the government results in frequent enquiries and recurring efforts to address the never-ending topic of how to assess financial hardship or what indicates a company's credit risk. A corporation in financial hardship, according to Fredrick (2018), might suffer expenses as a result of the circumstance, such as higher-cost finance, project opportunity costs, and lower-productivity employee labor costs. The cost of borrowing new capital for the company will almost always rise, making it more difficult and costly for the company to get the money it needs. To meet immediate responsibilities, management may choose to forego lucrative long-term initiatives in order to meet short-term obligations (Selassie, Tarekegn & Ufo, 2016). Employees of a failing company often have poorer morale and greater stress levels as a result of the increased likelihood that the company would go bankrupt, so forcing them out of their employment. When faced with such a load, such employees may be less productive, resulting in a decrease in the overall performance of the afflicted company.

Mbai (2018), in a response, argues that during a time of financial hardship, the affected firm may experience a variety of expenditures, either directly or indirectly, which often impairs its capacity to create returns and, as a result, results in a decrease in the value of the organization. When a company is in financial hardship, the expenditures spent by the affected company in an attempt to reverse the hazardous position are referred to as directly attributable costs. Among other things, restructuring expenses, auditor's salary, management salaries, and consulting fees paid to attorneys are examples of these charges. In contrast, indirect costs are expenses spent by the affected business primarily as a result of acts taken by stakeholders in the company, such as workers, suppliers, investors, and shareholders, rather than as a result of actions done by the affected firm itself (Muigai, 2016).

Theoretically, when a company is in financial crisis, its primary suppliers become less forbearing and may limit or stop their supply for fear of losing their cash if the company is liquidated, according to Asquith and Ngolobe (2018). The financial community, on the other hand, is either unwilling or unable to offer the full amount of needed capital infusion to the corporation, or they supply the funds on conditions that make the already distressed company difficult to turn around (Sporta, Patrick, Ngumi & Nanjala, 2017). As a result, the inability of such businesses to operate due to a lack of necessary resources such as supplies and financial resources to expand their product lines causes them to fail. Furthermore, shareholders may resort to radical measures such as investing the little resources they have left in high-risk ventures in the expectation that the initiatives would generate positive cash flows, therefore reversing the dire situation and resulting in profits for themselves and the company. Nevertheless, if these projects collapse, creditors will incur enormous financial losses. As further shown by the findings of Gichaiya, Muchina, and Macharia (2019), executives of a troubled organization are often motivated to misappropriate the entity's assets and resources while at the same time becoming more fearful of taking risks. The immediate result of this circumstance is that short-term actions and interests are given priority over long-term objectives that would ensure the long-term viability of the company (Bender, 2013). Because of this, investments in the quality of the goods and support via the purchase of relevant assets are pushed to the back of the lineup. Furthermore, accountability does not improve since the emphasis turns to the management of liquidity in order to prevent a worsening of the crisis. In the end, the afflicted company fails to take advantage of prospective investment possibilities that may have prevented the current financial crisis from occurring. As a result, the condition of financial distress causes the financial system of the problematic company to deteriorate, as well as the relationship between the company and its many stakeholders (Altman, 2013). The need to constantly review the financial status of the entity and determine whether there are

indicators of financial distress is necessary in order to eliminate the negative effects before they have a chance to manifest themselves. The purpose of this study is to determine the impact of financial risk on the financial distress of listed manufacturing firms on the Nairobi Securities Exchange.

Since independence, Kenya has seen a slew of instances of financial difficulty involving a wide range of businesses across all sectors of the economy. A good example of this is the fact that certain firms are undergoing financial reorganization, while others are being put under receivership and then delisted (Ong'era, Muturi, Oluoch, and Karanja 2017). Companies that have gone bankrupt according to Gibendi (2015) include Mumias Sugar Company, Webuye Paper Mills, Muhoroni Sugar Company, Uchumi Supermarket, and the Kenya Meat Commission, among others. There have been several incidences of serious financial difficulties in Kenya, including Uchumi store, Bulk medical limited, and E. A. Packaging industries limited, to name a few examples. Many different strategies are used by businesses to deal with financial distress. Some of these strategies include selling major assets, merging with other businesses, cutting capital spending, research and development, issuing new securities, negotiating debts with banks and other creditors, exchanging debt for equity and declaring bankruptcy, among others. To put it another way, businesses should plan and review their financial state in such a way that the danger of financial hardship is reduced at all costs in order to ensure the continued success of their operations. Despite the presence of numerous theories, enterprises are facing financial trouble, with some entering the last stage of distress, which is bankruptcy, while others have already collapsed. As a result of the above, it is critical to recognize and infer that business firms, and particularly public corporations, have a significant role to play in the overall management of the organization. The large number of financial failures that have occurred in recent years have highlighted the necessity for substantial study on financial hardship.

Firms in Kenya, both publicly traded and privately held, have faced financial difficulties and business collapse. Kenya Airways, Uchumi Ltd., Mumias Sugar, Marshalls E.A., Home Afrika, A. Baumann & Co, Express Kenya, Sameer Africa, E.A. Portland Cement, Atlas A.I., Eveready E.A., Kenatco Transport Ltd., Kisumu Cotton Mills, Pan African Vegetable Products, E.A. Coast Fisheries, Nakumatt Holdings, Dubai bank, Chase bank, and Imperial bank are examples of severely distressed companies (CBK, 2016; Cytonn Investments, 2018; ICDC, 2015; NSE, 2017). Persistent losses, operational inefficiencies, takeover attempts, delisting, receivership, and liquidation have all been experienced by these businesses. In addition, CBK (2016) confirms that several struggling businesses sought buyouts in order to stay afloat and avoid bankruptcy.

According to the Nairobi Securities Exchange Listing Rules (2014), the Capital Markets Authority issues clearance for the listing of securities on any securities exchange in Kenya, including all public offerings and listing of securities on the Nairobi Securities Exchange. If a security is not sold to the public and the listing is by way of introduction, a Securities Exchange may accept the listing of such security on a Growth Enterprise Market Segment. All companies proposing to offer their securities to the general public or a section of the general public are required to appoint a transaction adviser, who will be responsible for ensuring that the offering of securities is carried out in accordance with the applicable regulations before going public. In contrast to industrialized countries, where capital markets systems are generally intricate, effective, and highly efficient, the Kenyan capital market is still in its infancy on the majority of fronts, and it is still in its infancy on the majority of fronts (Ongore, 2011). It is important to note that the corporate bond market is especially young, as seen by the low degree of participation in the corporate bond sector (Mwangi, Anyango, & Ameyia, 2012). In other words, anytime nonfinancial companies are in need of extra debt capital, they will almost always turn to commercial bank loans as their primary source of debt funding, regardless of their industry. Bank loans in Kenya, on the other hand, are characterized by a considerably high interest rate regime, which puts additional burden on the financial performance of non-financial companies (Magara, 2012). Over the last several decades, the destructive repercussions of financial hardship on non-financial companies listed on the Kenyan stock exchange have been brought to light. This is shown by the large number of companies that have been thrown into receivership, have undergone financial reorganization, or have been delisted from the NSE entirely. Firms such as Uchumi Super Markets (2006), Kenya Planters Cooperative Union (2009), East African Packaging (2003), Dunlop Kenya, Regent Undervalued Assets Ltd (2001), Lonhro EA Ltd (2001), Theta Group (2001), and others have been identified in CMA data bulletins from 2003 to 2009. After a series of government-sponsored investigations into the issue, experts and members of the public alike have dismissed these theories as a result of their political expediency and a lack of scientific basis to back up their claims.

Statement of the Problem

Kenya like many other developing countries has not managed to develop a robust manufacturing sector, and to compound the problem further, the country has experienced a premature de-industrialization (Kenya Association of Manufacturers, 2018). The Kenya Economic Report (2018), further states that the manufacturing sector's contribution to GDP declined to 8.4 per cent from 9.1 per cent in 2016. This shrinking and unpromising growth has negated the ambitious goal of Kenya becoming a globally competitive and

successful upper-middle income country with a high quality of life by 2030, as outlined in Vision 2030, without a strong and vibrant manufacturing sector. The gross domestic product from manufacturing sector has been stationary and in some cases there has been drop due to seasonal fluctuations (Trading Economics, 2017). KPMG (2019) revealed that real growth in the manufacturing sector averaged 4.1% p.a. during 2010-2017 which is lower than the average annual growth in overall real GDP of 4.6%. It is estimated that manufacturing firms in Kenya have lost 70 per cent of their market share in East Africa (GoK, 2015) due to contingencies. This exposes a gap in the country's ability to achieve a fully industrialized economy by 2020 (WB, 2017). Kenya's publicly listed manufacturing entities are gradually facing imminent demise because of financial distress. Many of these financially distressed listed manufacturing firms are increasingly petitioning the exchequer for bailout, citing their strategic national importance. Kenya has experienced a fair share of listed manufacturing companies facing financial distress; notable examples are Eveready Company, East Africa Packaging, Sameer Africa, Mumias sugar, Athi River Mining, East Africa Portland Cement, and the East Africa Cables. Several firms in Kenya have been delisted from NSE due to liquidity and financial health. The delisted firms include Mumias Sugar Company, Kenya Airways, East Africa Packaging and Uchumi Supermarket. Mumias Sugar Company has been facing financial distress leading to their managers and directors hauled in court Kakah (2015) and Mbaru (2014).

This has resulted to reduction in government annual gross domestic product, inflation, unemployment and trading imbalance which has led to unstable and weak Kenya shilling as a consequence of rise in imports. The KPMG report argues that there is still a lot of room for expansion in Kenya's manufacturing sector but for this to happen; there is need to find out how financial risks influence financial distress of manufacturing firms (KPMG, 2019).

Empirical studies show mixed findings between financial distress and risk proxies. Gupta et al. (2017) established that financial risk significantly and positively enhanced financial distress. Conversely, Waqas and Md-Rus (2018) found financial risk correspondence and idiosyncratic risk to insignificantly predict financial distress. Firm-specific risk and financial risk have also been found to be significantly associated with financial distress costs (Rashid, 2014). On the contrary, Simlai (2014) asserts that common risk factors including systematic exposure, hardly plays any role in estimating the risk premium of distressed stocks. Firms can accommodate more financial risk with a high probability of survival and growth hence risk negatively relates with financial distress (Litov et al., 2016). However, Rashid (2014) found that companies with high firm-specific risk are exposed to distress costs hence, they integrate risk models in financial decisions. Almeida and Philippon (2017) further demonstrated that financial risk increases the present value of distress costs. Despite risk increasing the propensity to bankruptcy (Fang, 2016), this was found to be insignificant by Cassar and Holmes (2013). These contradicting results pertaining the relationship between financial distress and financial risk further motivates this study to determine the factual analytical influence of financial risk on financial distress of listed manufacturing firms in Nairobi Securities Exchange, Kenya.

Objectives of the Study

- i) To establish the influence of financial leverage risk on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.
- ii) To establish the influence of operational risk on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.
- iii) To determine the influence of liquidity risk on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.

Hypotheses of the Study

H₀₁ Financial leverage risk has no significant influence on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.

H₀₂: Operational risk has no significant influence on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.

H₀₃: Liquidity risk has no significant influence on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya.

II. Literature Review

Theoretical Framework

The study was guided by the following theory, pecking order theory, trade off theory and Liquidity Preference theory.

Pecking Order Theory

The information asymmetry component was brought to the pecking order theory by Myers and Majluf (1984), which had previously been presented by Donaldson (1961). Because of knowledge asymmetries

between firms and capital providers, they claimed, the relative costs of financing varied across various sources of funding. External financiers, such as debt holders and stock holders, will have less knowledge about a company than internal sources of financing in which the funds supplier is the company; as a result, these outsiders would demand a greater rate of return on their investments. This indicates that obtaining external financing is more expensive for the company than using internal money. Another aspect of showing the information asymmetry impact on funding is that, under normal circumstances, the insiders who make up the company's management and board of directors have more knowledge about the company than outsiders in terms of the firm's earning potential. Because of the lack of information available to outsiders, they underestimate the worth of the company. The premise that managers operate in the interests of current shareholders leads them to refuse to issue cheap shares unless the value transfer from existing shareholders to new owners is more than compensated by the net present value of the growth potential. Because of this, it follows that new shares will only be issued at prices greater than those imposed by the firm's genuine market worth in the future. As a result, investors consider the issuing of equity by a company to be an indication of overpricing of the stock. If external funding is inevitable, the business will choose secured debt over hazardous debt, and companies will only issue common stock as a last resort if all other options have been exhausted. According to Myers and Majluf (1984), corporations would prefer to use internal resources rather than expensive external financing. In other words, according to the pecking order hypothesis, businesses that are successful and, as a result, create high profits are predicted to employ less loan capital than firms that are not profitable and do not generate high earnings. If internal finances are insufficient, the management will issue debt first in order to protect the current shareholders from the diluting impact of the new capitalization. In order to avoid overvaluation of external equity, they will only issue external stock when they are sure that the market has fully assessed the firm's potential, in which case the external equity will be undervalued. Pecking order theory has the theoretical conclusion that there is a distinct finance hierarchy and that there is no clearly defined goal debt ratio, as stated by the trade-off theory. This theory provides for preference to use of internal funds in place of external funds that encapsulate debt and equity in an effort to preserve value and firm stability. The result is that increasing the usage of external capital, such as debt and equity, has a negative impact on the value of the business and raises the likelihood of financial difficulty occurring. The bigger the debt-to-income ratio, the greater the danger of a probable bankruptcy. Hussan (2016) conducts a study on the influence of leverage on the risk of a company's operations. He explains that leverage ratios include the debt-to-asset ratio and the debt-to-equity ratio, amongst other measures. A larger leverage ratio corresponds to a higher debt level. In the case of a firm's collapse, all creditors and debt holders have first claim to the assets of the company. The stockholders of a corporation with a high degree of debt may not get any compensation if the company goes bankrupt. As a result, it is possible to argue that leverage has a beneficial impact on financial hardship, which is consistent with the Pecking Order Theory.

Trade-off Theory

Modigliani and Miller (1963) developed tradeoff theory, which asserts that there are advantages to leverage within a capital structure up until the optimum capital structure is attained, beyond which there are no benefits. Firms obtain the most efficient capital structures by balancing the costs of borrowing against the advantages of doing business with them. According to this idea, the best financing mix for a company is determined by balancing the losses and profits associated with debt financing. Myers (1977) said that, although debt financing helps the corporation via tax-deferred cash flows, the advantages of debt financing are not indefinite. Instead, they are limited in time. Effectively, the theory postulates that as debt levels rise, the value of the business rises correspondingly until a threshold is reached when additional increases in debt usage raise both agency costs and bankruptcy costs and diminish the value of the firm, increasing the chance of bankruptcy. This theory contributes to the research by assisting us in comprehending how the tax shield advantage may be used to boost liquidity via borrowing. It does warn, however, that greater borrowing may negate the profits obtained from tax savings since agency and distress expenses would rise dramatically, which may result in the company filing for bankruptcy. As a result, this theory expresses concern about the impact of increasing borrowing on a firm's financial leverage level.

Liquidity Preference Theory

According to the liquidity preference hypothesis, the need for money is not to borrow money, but rather that the firm should strive to maintain its liquidity. This is owing to the fact that increasing the amount of money a firm borrows will diminish its profitability, cash flows, and net worth as a result of the high interest payments (Stewart, 2011), which in this research is likely to raise the chance of financial difficulty. The thesis was created by Keynes (1935), who argued that people and businesses keep money for three primary reasons: to invest, to save, and to invest again. The transactional motivation says that money is being retained in order for the person or business to be able to cover the day-to-day operating expenditures of the individual or organization. The

quantity of liquidity necessary will be determined by the degree of activity carried out by the person or company; the greater the level of activity carried out, the greater the amount of money needed. This study used the independent variable working capital to total asset ratio to assess the liquidity of sugar companies in Kenya. Companies with a negative, decreasing, or lower working capital to total asset ratio were classified as illiquid, and those with a negative, decreasing, or lower working capital to total asset ratio were classified as insolvent. When Petersen and Plenborg (2012) claimed in their paper "Liquidity and Liquidity Impairment," a firm's capacity to create positive net cash inflows both in the short and long term has an impact on the firm's ability to satisfy its short-term commitments as they become due when it is not liquid. In this study, for those listed manufacturing firms on the Nairobi Securities Exchange in Kenya that had a positive and increasing working capital to total asset ratio (liquid), they were able to speculate and repay their loans, reducing their total liabilities, meaning that the ratio book value of equity to total liabilities ratio increased, increasing the value of discriminant Z score and decreasing the likelihood of financial distress. They were also more likely to borrow when the working capital to total asset ratio (liquid) was low, indicating that they were less likely to go into financial distress (Stewart, 2011). Thus, the following independent variables are supported by this theory: liquidity risk, financial leverage risk, and credit risk. This is due to the fact that the more liquid a firm is, the greater the working capital to total assets ratio, which, for the purposes of this research, has the impact of boosting the discriminant Z score and, as a result, decreasing the chance of financial trouble. The more liquid a firm is, the fewer borrowings it has, which in this research had a probable influence on decreasing overall liabilities, which in turn increased the value of the discriminant Z score and decreased the chance of financial hardship.

Conceptual Review

A conceptual framework is a logical diagrammatic layout of the link that exists between research variables (Cooper & Schindler, 2014). In this study, conceptual framework showed the relationship between financial risk and financial distress. Financial risks were conceptualized as financial leverage risk; Operational risk and liquidity risk was measured by liquidity asset divided by total assets as well as total assets divided by total deposits. Financial distress was used as dependent variables. Figure 2.1 represent the study's conceptual framework.

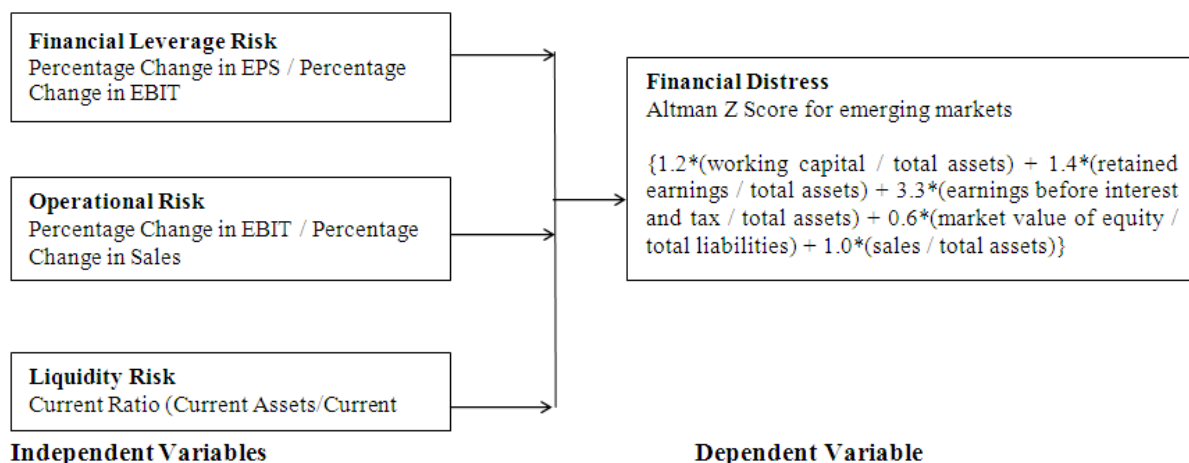


Figure 1.0: Conceptual Framework

The amount of fixed financial costs in a company's total cost structure is a good indicator of the risk associated with financial leverage. When stock and preference share capital are combined with long-term fixed-interest-bearing debt, this is referred to as "financial leverage." Financial leverage is defined as the gap between the rates of return earned by a firm on its own assets and the rates of return required by the company to pay its creditors (Oketch, Namusonge & Sakwa, 2018). Financial leverage is utilized to get flexible access to financial markets, to buy back stock, and to increase shareholder value, among other things. The use of financial leverage by businesses is often intended to generate more profits in terms of interest payments on capital than in terms of expenses. Financial leverage is defined as fluctuations in Shareholders' income as a consequence of changes in operational profits as a result of financing a corporation's assets with preferred stocks or debt securities (Aliu, 2010). The corporation may make excellent use of long-term fixed-rate financing with no interest payments. If this is the case, only equity owners will be able to benefit from profits that exceed fixed interest. As a result, the return to equity stockholders is raised significantly.

The operational risk multiple is a measure of how much a company's operating income will fluctuate in response to a change in sales volume (Mandelker & Rhee, 2011). In the service business, operational risk is a rapidly growing topic of study. The recognition of operational risk as a distinct risk category is a relatively recent development in most organizations. In contrast to market risk factors, operational risk factors are mostly associated with the firm's internal rules and processes. Occasionally, losses resulting from a firm's operational risks might outweigh losses resulting from credit losses in terms of magnitude. In order to ensure that the risks inherent in their company are adequately handled, it is consequently a critical area of concentration for management. In the early stages of development, the procedures of identifying and monitoring operational risks are still in their infancy. Developing an operational risk management framework is still in its early stages for the companies (Marliana, 2011)

It is possible that investors could have difficulty in trading and will be unable to transact rapidly enough to avoid or limit losses. This is referred to as liquidity risk, or more specifically, future uncertainty of liquidity level. This risk is said to be an inherent characteristic of financial instruments. It is defined as the degree to which market portfolio excess return is sensitive to changes in market liquidity when these changes occur in aggregate and the consequence is substantial, implying that systematic liquidity risk is priced (Hsieh, 2013). While market risk exists in both perfectly and imperfectly liquid markets, liquidity risk is an additional and important financial risk that investors face when markets are not perfectly liquid. When markets are not perfectly liquid, investors face a number of additional and significant financial risks (Papavassiliou, 2013). LuoDengve's study proposes various different types of liquidity risk, each of which has its own distinctive characteristics (2010). The variance of future liquidity level is the initial proposal for determining the volatility of liquidity in a given situation. Second, the standard asset pricing model, which only compensates for a portion of risk, particularly financial risk, leads to the development of the second proposal. The result is that risk compensation will only apply to a fraction of the volatility in liquidity levels, known as systematic liquidity risk or commonality in liquidity. The remaining amount of liquidity risk will be removed by diversification. The commonality in liquidity indicates an interaction between the liquidity levels of different securities, specifically the same trend in the direction of movement, which is explained by the impact of common market factors.

Financially distressed businesses are those that are suffering financial problems in order to sustain their regular operations, and in the most extreme cases, they may be subject to bankruptcy (Baharin & Sentosa, 2013). These are situations that are occurring that may result in bankruptcy, such as loan contract violations. It is a state that occurs when a firm is unable to satisfy (or is having difficulty meeting) its financial commitments to its creditors on time. A cash flow shortfall arises when operational cash flows are insufficient to meet current commitments, and the company is required to take remedial measures (Ray & Mahavidyalaya, 2011). Managerial incompetence is the most common reason for a company's distress and possible failure but the ultimate cause of failure is often simply running out of cash and other liquid funds (Aasen, 2011). There are two types of financial distress costs; direct bankruptcy costs and indirect bankruptcy costs. Direct bankruptcy costs include primarily legal and administrative costs while indirect bankruptcy costs reflect the difficulty of managing a company when it faces bankruptcy. Indirect costs are hidden and not as obvious as direct costs. Indirect costs are lost opportunities which the company misses as a result of a deteriorating solvency position. These costs are unobservable and difficult to estimate (Aasen, 2011).

Empirical Review

According to Adenugba, Ige, and Kesinro (2016), they attempted to investigate the link between financial leverage and company value, as well as analyze the influence of financial leverage on firm value in their research. According to the findings of the research, there is a statistically significant association between financial leverage and business value, and that financial leverage has a statistically significant influence on firm value. When it comes to financing long-term projects, financial leverage outperforms equity as a source of capital, according to the findings of the research. Fredrick (2018) used the panel corrected standard error (PCSE) approach to study the relationship between capital structure and corporate financial distress in Nigerian manufacturing enterprises. The findings of the study suggest that financial leverage has a negative impact on corporate financial hardship, but the age of the firm relative to its listing years, profitability, and asset tangibility have a favorable impact on corporate financial distress. Nurhayati, Mufidah, and Kholidah (2017) conducted an investigation into four fundamental variables of firms in the basic industrial and chemical sectors that are publicly traded on the Indonesian stock market. Debt-to-asset ratios that were positive, current ratios that were negative, and return on assets that were negative were shown to be predictors of potential financial difficulty in the logistic regression test. The total assets turnover was not able to determine whether the firms belonged to the financially distressed or non-financially distressed groups of enterprises. Muigai (2016) intended to determine the impact of capital structure on the financial distress of non-financial enterprises that were listed on the National Stock Exchange (NSE). According to the findings of the research, financial leverage, asset tangibility, and external equity all have a statistically significant negative impact on the financial distress of non-financial

companies. Although internal equity and long-term debt are important in alleviating financial crisis in non-financial enterprises, they are also important in financial distress in financial organizations. To investigate the effect of financial leverage as a financial antecedent of financial distress among listed firms on the Nairobi Securities Exchange in Kenya, Ong, Muturi, Oluoch, and Karanja (2017) conducted a study with the help of the Nairobi Securities Exchange. The research discovered a statistically significant association between leverage and financial hardship. The relationship was evaluated and found to have an $R^2 = .799$, which suggested that leverage explained 79.9 percent of the variation in financial distress after being evaluated. A good degree of fit is achieved by the relationship model, indicating that leverage was one of the possible predictors of financial distress in publicly traded businesses traded on the Nairobi Securities Exchange in Kenya. Mbai (2018) intended to identify the factors that contribute to financial hardship among chosen companies that are listed on the Nairobi Securities Exchange, namely Kenya Airways and Uchumi Supermarkets. According to the findings of the research, financial leverage has a statistically significant positive link with financial hardship as evaluated by the Altman Z score. A unit rise in leverage is associated with a decrease in financial distress, as assessed by the Altman Z scores of the companies under study, according to the findings of a regression coefficient analysis.

Ufo (2015) conducted research on the factors that contributed to financial hardship among industrial enterprises in Ethiopia between 1999 and 2005. The outcome demonstrates that operational risk has a positive and statistically significant impact on debt service coverage. If policymakers want to preserve neonatal manufacturing companies, they may influence their financing policies by encouraging the use of equity financing and limiting the use of borrowing. During the loan review process, banks should monitor the effectiveness of enterprises in alleviating debt burdens by using a variety of methodologies to assess their effectiveness.

Wangige (2016) investigated the factors that contribute to financial distress among publicly traded firms in the Kenyan market. The research design adopted in this study was causal in nature. In this study, the dependable variable (financial distress) and the independent variables were shown to have a negative non-significant association (operational risk). According to the results of the panel Logit model used in the research, it is obvious that the variables that explain or contribute to financial hardship across enterprises are not limited to a single categorization category or classification system. To determine if financial measures can be used to anticipate financial hardship in the non-financial sector of Kenyan firms that are listed on the Nairobi Stock Exchange, Otom (2014) conducted a study. The findings of the research indicated that there are characteristics that may be used to identify situations that lead to financial hardship. According to the findings of the research, the indicators that indicate financial difficulty are those that are connected to operational risk. A second finding of the research is that certain financial parameters may be used to anticipate financial difficulty for non-financial sector Kenyan companies that are listed on the Nairobi Stock Exchange. Selassie, Tarekegn, and Ufo (2016) performed a study to determine the extent of financial hardship experienced by SMEs in the Wolaita Zone and the variables that influence their financial health. As a consequence, according to the findings of Altman's Zeta Score Model study, three of the ten chosen enterprises in the service sectors are found to be financially distressed as a result of operational risk, while none of the tested SMEs in the sector are determined to be below the bankruptcy threshold. When it comes to the manufacturing sector, just one of the chosen SMEs has a Zeta score that is below the bankruptcy line, while the other nine SMEs are deemed to be in financial hardship, despite the fact that their Zeta score is above the bankruptcy line. According to Jaafar, Muhamat, Alwi, and Karim (2018), the Altman Z-Score Model was used as a proxy for financial hardship in a study of Practice Note 17 (PN17) businesses listed on the Malaysian stock exchange, in order to assess financial distress. According to the results, operational leverage and profitability are key drivers of financial trouble in the short run.

Khafid, Tussyannah, and Suryanto (2019) investigated the relationship between liquidity and management ownership in Indonesian mining businesses experiencing financial hardship. According to the findings of the research, liquidity has no impact on financial hardship.

Gichaiya, Muchina, and Macharia (2019) conducted an investigation on the relationship between liquidity risk and financial hardship. A correlational technique was used in conjunction with a quantitative research design to examine all non-financial companies that were listed on the Nairobi Securities Exchange (NSE) between the years 2006 and 2015. Secondary data was gathered from audited financial statements, daily stock prices, and stock market indexes for the purpose of this research. Hierarchical panel regression analysis was used in the data analysis process. Based on the findings, it can be concluded that liquidity risk has a large and favorable impact on financial hardship. Specifically, according to Dirman (2020), the research goal to be attained is to convey insight and information to the general public, particularly investors and creditors, regarding the influence of liquidity and free cash flow on financial distress. It was discovered by this study's findings that financial distress is not affected by liquidity, and that characteristics related to business size are negatively associated with financial hardship.

To determine if liquidity is a financial antecedent of financial hardship among listed firms on the Nairobi Securities Exchange, Ong'era, Muturi, Oluoch, and Karanja (2017) conducted a study. Upon

investigation of the link, the research discovered a statistically significant association between liquidity and financial hardship. Despite the fact that the connection model has a modest fit, it reveals that liquidity was one of the possible predictors of financial distress in publicly traded businesses on the Nairobi Securities Exchange. As a result, it advises the formulation of recommendations for the amount of liquidity that publicly traded corporations should maintain in order to be solvent. The research conducted by Wesa and Otinga (2018) intended to identify the factors that contribute to financial hardship in the setting of publicly traded companies. Multiple regression revealed that liquidity (= -1.221, p-value=.004) had a substantial impact on the financial distress of publicly traded companies on the National Stock Exchange. A primary factor of financial hardship, the research found, was liquidity, and organizations should seek to set moderate liquidity levels that guarantee payment of maturing short-term commitments while still assuring optimal returns on investment. Aiming to determine the effect of financial factors on financial distress of tier two commercial banks in Kenya, Munguti (2019) set out specific objectives, including determining the effect of liquidity, determining the effect of firm size, and evaluating the effect of foreign ownership on financial distress of tier two commercial banks in Kenya. According to the findings of the research, there is a statistically significant association between liquidity as a financial element and financial distress of tier two commercial banks operating in Kenya.

III. Material And Methods

To investigate the relevance of the research purpose with economic procedure, this study adopted a longitudinal research design to collect and analyze data. Longitudinal research design involves repeated observations of the same variables such as people over short or long periods of time. From NSE handbook (2018), the total eight manufacturing firms listed were considered as the target population as well as the sample size of the study and financial data analyzed for a period of 5 years making a total of 40 observations. This study used secondary data. The data was drawn from past audited financial reports (Income Statement, Statement of Financial Position, and Cash Flow Statement) as they are published by the respective companies in CMA. The secondary data was retrieved from financial records of manufacturing companies listed at the NSE as published each year by NSE; the consideration period was between the financial years 2016 to 2020 (5 years period of time). Data was analyzed by regression panel data analysis tool. Data analysis included both descriptive and inferential statistics where model specification estimation and rationale of variables were done. Descriptive statistics included measure of central tendency; mean and measure of variability; standard deviation, maximum and minimum. These descriptive statistics was used to develop indices and measures to summarize the collected data (Kothari, 2007). The study used inferential statistics which are regression analysis and correlation analysis to test null hypotheses. These statistical tests were at 5% significance level. Secondary data was transformed into natural logarithm. The level of significance of 5% was used as a benchmark. If the P value is less than 0.05 at 5% significance level, reject the null hypotheses and accept the alternative and vice versa. Standard multiple regression model was used to measure the influence of financial risk on financial distress. This included fixed and random effects regression model as well as multiple linear regression models. Fixed and random effects regression model was used for individual financial risk measure while multiple linear regression for all financial risk measure as a block. All analyses were done using STATA 15. The regression model was as follows

$$Y_{it} = \alpha + \beta_1 FLR_{it} + \beta_2 OLR_{it} + \beta_3 LQR_{it} + \epsilon_{it}$$

Where:

- Y_{it} represents Financial Distress for firm (i) in period (t)
- α = Determines the level of fitted lines
- β_1, β_2 and β_3 = Regression coefficient
- FLR_{it} = Measure of financial leverage risk for firm (i) in period (t)
- OLR_{it} = Measure of operational risk for firm (i) in period (t)
- LQR_{it} = Measure of liquidity risk for firm (i) in period (t)
- ϵ_{it} = Error term

IV. Result and Discussion

Descriptive Analysis

The descriptive statistics entailed Minimum, Maximum, Mean and standard deviation between 2016 and 2020. The results also showed overall descriptive statistics as obtained from panel data of said periods.

Table 1: Descriptive Statistics

Year	Financial Leverage Risk	Operational Risk	Liquidity Risk	Althaman Z-Score
Minimum	-0.28833	-0.66276	0.453799	-5.66443
Maximum	8.030388	0.735058	9.428015	7.973878
Mean	1.381897	0.139756	2.231278	3.876664
Std Deviation	2.059092	0.305101	1.804906	2.754633

SE(mean)	0.325571	0.048241	0.285381	0.435546
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From Table 1, financial leverage risk which was measured by Percentage Change in EPS / Percentage Change in EBIT. From time series summary, the variable had a mean of 1.38 with a standard error of 0.33 and standard deviation of 2.06. It ranged from -0.29 to 8.03. Similarly, operational risk was measured by Percentage Change in EBIT / Percentage Change in Sales. The variable had a mean of 0.14 with a standard error of 0.05 and standard deviation of 0.305. It ranged from -0.66 to 0.73. Liquidity risk had a mean of 2.23 and standard error of 0.29 with a standard deviation of 1.80. It ranged from 0.45 to 9.43. Lastly, financial distress which was measured using Altman Z-score ranged from -5.66 to 7.97 with a mean of 3.88. The variable had standard error of 0.44 and standard deviation of 2.75. Table 2 shows Financial Distress of Listed Manufacturing firms between 2016 and 2020.

Table 2: Financial Distress of Listed Manufacturing firms

FIRMID	Minimum	Maximum	Mean	Standard Dev	Financial Distress
1	-5.66443	7.126523	0.483554	4.853519	Distress Zone
2	4.882821	7.973878	6.202861	1.114114	Safe Zone
3	-0.74989	1.47179	0.720207	0.852035	Distress Zone
4	2.870512	4.099456	4.384162	0.500615	Grey Zone
5	2.462438	3.949355	3.131435	0.564518	Distress Zone
6	5.290323	7.62667	6.683974	0.929712	Safe Zone
7	4.13352	6.952238	4.983511	1.153208	Grey Zone
8	3.180406	3.853398	4.423616	0.273	Grey Zone
Overall	-5.66443	7.973878	3.876665	2.754633	Distress Zone

As per Begley and Ming (2007) classification, the listed manufacturing firms are under distress zone (Zones of discrimination: $Z > 5.85$: Safe zone, $4.15 < Z < 5.85$: Grey zone, $Z < 4.15$: Distress zone). Listed manufacturing firms in distress zone with three of the 8 listed firms classified as distressed, three of the 8 listed firms classified as grey zone and only two firms classified as safe firms as far as financial distressed is concerned. Figure 1 show scatter plot for Z-Score for individual companies between 2016 and 2020.

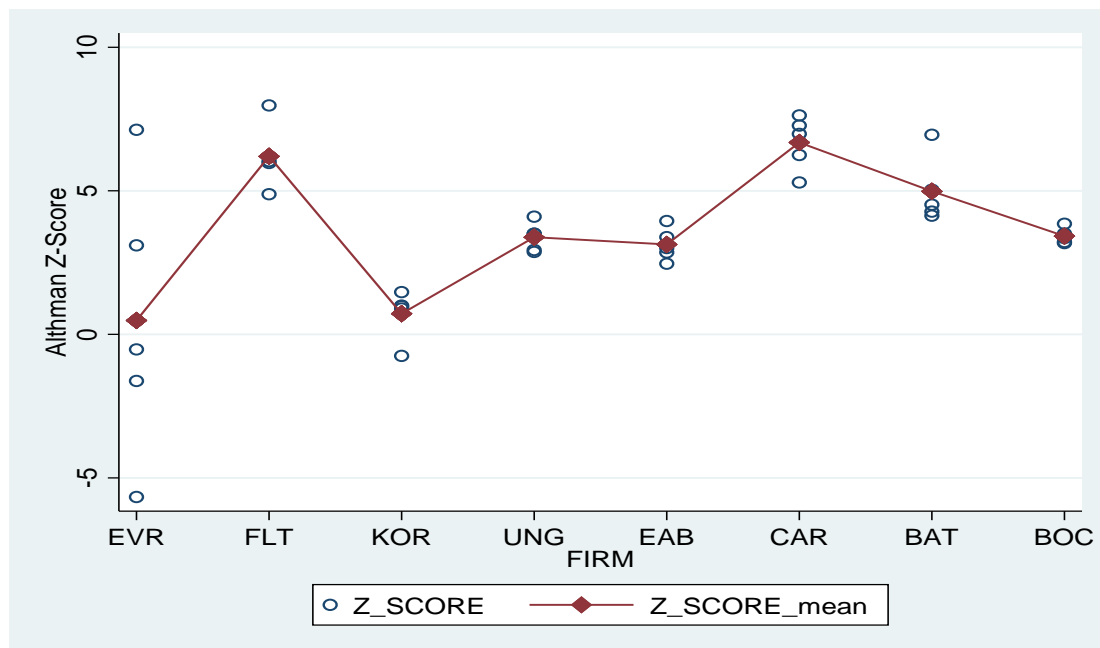


Figure 1: Scatter Plot for Financial Distress

Inferential Analysis

Unit Root Test

The study used Im, Pesaran and Shin (IPS) to test for the presence of unit roots in panels that combine data from the dimension of the time series with that of the cross-section dimension, so that fewer time observations are required for power to be available for the test. The results are indicated in Table 3.

Table 3: Unit Root Test

Variable	Im-Pesaran-Shin unit-root Test
Financial Leverage Risk	-3.5115 ** 0.0002
Operational risk	-3.5844** 0.0002
Liquidity Risk	-1.8197 * 0.0344
Financial Distress	-2.2405 ** 0.0125

* sig at 5% level, ** sig at 1% level, D-First Difference

A p-value above 0.05 indicates the presence of unit roots, whereas a p-value under 0.05 indicates that the unit roots were not present for Im-Pesaran-Shin tests. The results indicated that there was absence of unit root for the study variables. This showed that all variables are stationery, there was no problem of unit root, and the results can proceed for further inferential statistics.

Hausman Test (Choice of Model)

The study determined whether to run a fixed effects model or a random effects model when conducting panel data analysis. The results are indicated in Table 4.

Table 4: Hausman Test

	(b) Fixed	(B) Random	(b-B) Difference	sqrt(diag(V_b- V_B)) S.E.
Financial leverage risk	0.479309	0.348694	0.130615	0.398511
Operational risk	4.656453	4.56291	0.093544	0.427135
Liquidity Risk	0.785311	0.594599	0.190713	0.199581

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg
 Test: Ho: difference in coefficients not systematic
 $\chi^2(3) = (b-B)'[(V_b-V_B)^{-1}](b-B)$
 = 1.46
 Prob>chi2 = 0.6917
 (V_b-V_B is not positive definite)

Results of Table 4 showed a prob>chi2 value of 0.6917 that is higher than the critical P value at a significance level of 0.05, which implies the random distribution of cross-sectional population units. Thereby no rejecting the null hypothesis that the model of a random effect is the best. The study therefore will employ a model of random effect regression. The study hence used a random effect regression model. Maniagi (2018) used random effect regression model when investigating the influence of financial risk on financial performance of commercial banks in Kenya after carrying out Hausman test while addressing the objectives of the study. Results in the table 4 indicated a prob>chi2 value of 0.0048 which is less than critical P value at 0.05 level of significance which implies that the null hypothesis that a Fixed Effect model is the best was rejected. The study hence used a fixed effect regression model.

Correlation Analysis

The study further used correlation analysis to test the association between independent variables and dependent variable for linearity and between independent variables for multi-collinearity. The results are as shown in table 5.

Table 5: Correlation Analysis

	Financial Distress	Financial Leverage Risk	Operational Risk	Leverage
Financial Distress	1			
Financial Leverage Risk	0.3196	1		
	0.0137*			

Operational Leverage Risk	0.6802 0.0000**	0.2036 0.2077	1
Liquidity Risk	0.4537 0.0033**	0.2136 0.1856	0.6011 0.000**

* Significance at 5% and ** significance at 10%

The results in Table 5 revealed that there was no high correlation among the independent variables (financial leverage risk, operational risk and liquidity risk) as indicated with correlation coefficients less than 0.8. It implies that there was no multi-collinearity among independent variables. The relationship between financial leverage risk (0.3196), operational risk (0.6802), liquidity risk (0.4537) and financial distress was positive.

The results indicated that there is significant positive relationship between financial distress and financial leverage risk as indicated by $P=0.01374$ ($P<0.05$). This implies that increase in financial leverage risk would result to increase financial distress. The results are in agreement with Abubakar (2017) examined the effect of financial leverage risk on the financial distress using 7 companies quoted on the Services Sector of the Nigerian Stock Exchange (NSE), during the period 2005-2016. The study found there is significant relationship between financial leverage risk and financial distress.

The results indicated that there is significant relationship between financial distress and operational risk as indicated by $P=0.0000$ ($P<0.05$). This implies that increase in operational risk would result to decrease financial distress. The results are in agreement with Gatsi, Gadzo and Akoto (2013) who investigated how financial distress of insurance firms in Ghana, is influenced by working capital management and leverage using 18 firms. The study found there is significant relationship between operational risk and financial distress.

The results indicated that there is no significant relationship between financial distress and liquidity risk as indicated by $P=0.3140$ ($P>0.05$). This implies that increase in liquidity risk would not result to significant increase financial distress. Therefore, liquidity risk has no significant relationship with financial distress. The results are in agreement Ng'aari (2016) who concluded that there is no bidirectional relationship between profitability and liquidity in commercial banks in Kenya and liquidity had no significant effect on the performance of Kenyan commercial banks. However, Maaka (2013) indicated that there is a significant impact of all the factors of liquidity risk on performance of the banking system in Kenya when investigating relationship between liquidity risk and performance of commercial banks in Kenya.

Multiple Linear Regression

The study investigated the influence of financial risk on financial distress among listed manufacturing firms in Nairobi Securities Exchange, Kenya. In this regression, the four independent variables were entered as a block. Table 6 contains the findings.

Table 6: Regression Random Effect of Financial Risk on Financial distress

Random-effects GLS regression			Number of obs =	40		
Group variable: FIR MID			Number of groups =	8		
R-sq:			Obs per group:			
within = 0.4719			min =	5		
between = 0.4819			avg =	5		
overall = 0.4602			max =	5		
corr(u _i ,X)	=	0	(assumed)	Wald chi2(2) =	30.57	
				Prob > chi2 =	0.000	
Financial Distress	Coef.	Std. Err.	Z	P>z	[95% Conf. Interval]	
FLR	0.04026	0.01969	2.04	0.041	0.02885	-0.0716712
OPR	4.56291	1.224094	3.73	0.000	2.16373	6.962089
Liquidity risk	0.59459	0.27575	2.16	0.031	0.054139	1.135058
_cons	-0.1027	0.028027	-3.66	0.000	-0.15763	-0.047764
sigma_u	1.929688					
sigma_e	1.431613					
Rho	0.644995	(fraction of variance due to u _i)				

The result obtained from random effect model indicated that financial risk accounted for 46.02% (Overall R square = 0.4602) of the variation in financial distress of manufacturing firms listed on the NSE. The

findings revealed Wald chi-square = 30.57 with a corresponding p-value = 0.000. This implies that financial risk significantly influence financial distress of listed manufacturing firms at NSE. The overall regression model is as shown below:

$$\text{Financial Distress} = -0.1027 + 0.0403\text{FLR} + 4.563\text{OR} + 0.595\text{Liquidity Risk}$$

Where FLR is Financial Leverage Risk

OR is financial Risk

From the findings, financial leverage risk had a regression co-efficient of -0.04026 implying that when operational risk and liquidity risk are controlled, a unit increase in financial leverage risk across time and among manufacturing listed firms would result in a decrease of 0.0403 units in financial distress. This relationship was further found to be statistically significant since the p-value was 0.041 which was lower than the adopted significance level of 0.05. There financial leverage risk was found to be significantly and positively related to financial distress of manufacturing firms listed on the NSE. The findings are in agreement with Fredrick (2018) who investigated the effect of capital structure on corporate financial distress of manufacturing firms in Nigeria. The outcome of the research reveals that a financial leverage risk affects corporate financial distress positively. Muigai (2016) sought to investigate the effect of financial leverage risk on financial distress of non-financial companies listed in NSE. The study concluded that financial leverage risk has a significant positive effect on financial distress of non-financial firms. However, Nurhayati, Mufidah and Kholidah (2017) asserted that financial leverage risk was not able to predict whether the companies belonged to financially distressed or non-financially distressed.

The study established that operational risk had a regression co-efficient of 4.563 implying that when financial leverage risk and liquidity risk are controlled, a unit increase in operational risk across time and among manufacturing listed firms would result in an increase of 4.5631 units in financial distress. This effect was found to be statistically significant since the p-value was 0.000 which was lower than the adopted significance level of 0.05. Therefore, operational risk was found to be significant and positively related to financial distress of manufacturing firms listed on the NSE. The results are in agreement with Ufo (2015) who investigated the determinants of financial distress of manufacturing firms in Ethiopia for the period from 1999 to 2005. The result proves that operating risk has a positive and significant influence on financial distress. Otom (2014) sought to confirm whether financial ratios can be used to predict financial distress in the non-financial sector of Kenyan companies listed in the Nairobi Stock Exchange. . The study found that the variables that reveal financial distress are those related to operational risk. The study also confirms that financial ratios can predict financial distress for non-financial sector Kenyan firms listed in the Nairobi Stock Exchange. However, Wangige (2016) established the causes of financial distress among listed companies in Kenyan market. There was a negative non-significant relationship between the dependable variable (financial distress) and independent variables (operational risk).

From the findings, liquidity risk had a regression co-efficient of -0.595 implying that when operational risk and financial risk leverage are controlled, a unit increase in liquidity risk across time and among manufacturing listed firms would result in an increase of 0.595 units in financial distress. This influence was found to be statistically significant since the p-value was 0.031 which was lower than the adopted significance level of 0.05. Hence, liquidity risk was found to have significant and positively related to financial distress of manufacturing firms listed on the NSE. The results are not in agreement with Gichaiya, Muchina and Macharia (2019) examined the influence of liquidity risk on financial distress. The results show that liquidity risk significantly and positively influences financial distress. Munguti (2019) sought to establish the effect of financial factors on financial distress of tier two Commercial Banks in Kenya. The study revealed a significant relationship between liquidity as a financial factor on financial distress of tier two commercial banks in Kenya. However, Khafid, Tusyanah and Suryanto (2019) analyzed the effect of liquidity risk on financial distress at mining companies in Indonesia. The results of the study show that liquidity does not have any effect on financial distress.

V. Conclusion and Recommendation

Based on the empirical evidence, a number of logical conclusions can be made as follows and presented in terms of study objectives: In line with the first objective, influence of financial leverage risk on financial distress of manufacturing firms listed on the NSE the study concluded that financial leverage risk has significant positive effect on financial distress of manufacturing firms listed on the NSE. Therefore, financial leverage risk has got significant influence on financial distress of manufacturing firms listed on the NSE. The conclusion is supported by the tradeoff theory which explains how the levels of leverage affect financial distress of Tier two Commercial Banks in Kenya. Whenever an organization take up debt, it trades off its freedom in making decisions that influence its profitability with debt constraints and this introduces the risk of financial distress that may lead to bankruptcy in cases where firms fail to repay their debts as scheduled. The second

objective of the study was to establish the influence of operational risk on financial distress of manufacturing firms listed on the NSE. The study concluded that operational risk has significant negative influence on financial distress of manufacturing firms listed on the NSE. An increase in operational risk would result to significant increase financial distress of manufacturing firms listed on the NSE. Having high proportion of fixed operating costs in relation to variable operating costs results to increase in operational risk which positively affects financial distress. Further, holding fixed assets which attract high fixed operating cost with low returns results to high operational risk that positively affects financial distress. The third objective of the study was to establish how liquidity risk influence financial distress of manufacturing firms listed on the NSE. The study concluded that liquidity risk has significant negative effect on financial distress of manufacturing firms listed on the NSE. An increase in liquidity risk would result to no significant increase financial distress of manufacturing firms listed on the NSE. This conclusion is supported by the Liquidity preference theory that acknowledges that on its own, liquidity does give assurance of good performance. This means that a firm could be highly liquid and still find itself in a financial distress because liquidity on its own does not significantly affect financial distress. Thus, it can be documented that the study was conclusive in regards to the relation between liquidity risk and financial distress.

The study recommends that listed manufacturing firms should source for less costly sources of finance which don't exhaust the earnings of the firms. Listed manufacturing firms should also negotiate for better and longer credit terms in relation to repayment terms and interest rates. The study recommends proper guidelines and procedures to be put into place by the listed manufacturing companies' management on operational risk management to ensure risk is well mitigated. This can be done by managers of listed firms lowering the proportion of operating fixed cost in relation to operating variable cost. This can be achieved by reducing the cost associated with fixed assets which attracts fixed operating cost monthly as well as investing in fixed assets which have high returns. The internal audit department should also come up with guidelines on how to curb operational risk such as instituting safety measures and measures of reducing expenditure and operational costs. The study recommends that listed manufacturing firms should avoid holding too much liquid assets as highly liquid assets are associated with lower returns than risky assets. As such, the opportunity cost of having too many liquid assets outweighs the return it generates. Therefore, managers of listed manufacturing firms should invest excess liquid in productive assets that would increase returns. The study recommends that listed manufacturing firms should not fall below required liquidity threshold as they would fail to meet their cash obligation when they arise.

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