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LIQUIDITY RISK MANAGEMENT AND FINANCIAL DISTRESS OF INSURANCE FIRMS LISTED AT NAIROBI SECURITY EXCHANGE, KENYA

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ABSTRACT

Financial distress continues to threaten the stability, solvency, operational continuity of insurance firms listed on the Nairobi Securities Exchange (NSE).Despite the critical role of these firms in risk mitigation, savings mobilization, and investment, there remains limited empirical evidence on how liquidity risk management contribute to their escalating financial distress. The objective of the study was to determine the influence of liquidity risk management on financial distress of insurance firms listed at Nairobi Security Exchange, Kenya. Guided by this objective, the study was anchored on the Liquidity Preference Theory.The study adopted a descriptive research design and targets all (6) six insurance firms listed at the NSE and applied a census approach due to the small and unique population. Secondary data covering a ten-year period (2016-2025) was collected using a secondary data collection sheet and extracted from audited financial statements and annual reports. The data was coded and analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0, employing descriptive statistics means, standard deviations, frequencies and inferential analysis including correlation and panel regression to determine relationships and effects among variables.The findings revealed that liquidity risk management had a negative and significant relationship with fianacial distress. Based on these findings, the study concluded that the effect accounted for 62.1% of the variation in financial distress of insurance firms listed at the NSE,Kenya.The findings revealedliquidity risk management had a significant negative effect on financial distress (β = -0.317, $p < 0.05$) on insurance firms listed at the NSE, Kenya.The study recommends insurance firms should adopt integrated risk-management frameworks that simultaneously address liquidity risk.

Key Words:*Liquidity Risk Management;Financial Distress, Insurance Firms Listed at the Listed at the Nairobi Securities Exchange, Kenya*

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BACKGROUND OF THE STUDY

Insurance firms are financial institutions that provide risk management services by offering insurance policies to individuals, businesses, and organizations (Tee, 2020). These firms collect premiums from policyholders in exchange for protection against specified financial losses or damages resulting from unforeseen events such as accidents, illness, theft, or natural disasters (Geeta, etal., 2024). Insurance firms pool the risks of their clients and use actuarial science and statistics to predict future claims and ensure financial stability. They play a critical role in promoting economic growth by offering security, encouraging investment, and facilitating recovery after loss (Ibrahim & Aljaloud, 2024). Their operations also support job creation, innovation in financial services, and overall economic resilience.

Financial distress is a condition in which a company or individual experiences difficulty in meeting financial obligations, such as paying debts, loans, or operational expenses (Isamaila, etal., 2023). It often arises from poor cash flow, declining revenues, excessive debt, or unexpected financial setbacks. Signs of financial distress include missed payments, reduced access to credit, layoffs, and asset liquidation. If not addressed promptly, financial distress can lead to insolvency or bankruptcy (Sharma & Goyal, 2023). Financial distress in insurance firms holds significant implications for both the financial sector and the broader economy. When an insurance firm experiences financial distress, such as difficulty meeting its obligations, declining profitability, or inadequate capital reserves, it undermines the trust of policyholders, investors, and regulators (Tee, 2020).

This lack of confidence can trigger policy cancellations, regulatory interventions, and even systemic risk if multiple firms are affected (Oyetayo, etal., 2024). Moreover, financial distress may impair an insurance company's ability to settle claims, particularly during crises or natural disasters when timely compensation is vital. This can leave individuals, businesses, and other institutions vulnerable, affecting their financial recovery and operational continuity (Chishamba, 2025). Additionally, distressed insurers might be forced to liquidate assets rapidly, potentially depressing asset values and creating instability in financial markets (Hakizimana & Tuyisenge, 2023).

Liquidity risk management is the process of ensuring that the organization can meet its short-term obligations without incurring excessive costs or losses (Geeta, etal., 2024). It focuses on planning, monitoring, and controlling the organization’s financial obligations, including debts, deposits, and other payable commitments (Anjili, 2024). The goal is to structure liabilities in a way that minimizes costs, manages repayment schedules, and ensures that funding sources are reliable, sustainable, and well-matched to the organization’s asset base and revenue flows (Ambetsa, 2023). The claims/loss ratio, which measures the proportion of claims incurred relative to premiums earned, is a key indicator of liquidity pressure and operational sustainability. A lower and stable claims/loss ratio suggests effective risk underwriting, better cash flow predictability, and stronger liquidity positioning.(Kamau & Mwangi, 2023).

Statement of the Problem

Insurance firms listed at the NSE play a critical role in Kenya’s financial system by providing essential risk-mitigation services to individuals, businesses, and public institutions. According to the IRA (2022) and Cytonn (2022), insurance firms listed on the NSE have been experiencing financial distress in the last ten years. According to IRA (2024), the ideal solvency ratio for insurance firms should be 2 or higher, which is generally interpreted as the ideal safety margin to suggest robust financial health in the Kenyan insurance market. However, the insurance firms listed at the NSE have not achieved this threshold in the recent past, as reports show a deteriorating solvency margin ratio. For instance, in 2016, 2017, and 2018, the solvency margin ratios were relatively high at 3.14, 3.15, and 3.28, respectively, all above the benchmark, indicating strong financial positions and adequate capital buffers during this period. However, in 2019 and 2020, the ratios declined sharply to 1.15 and 1.12, respectively, falling below the recommended threshold and signaling periods of financial distress and increased vulnerability. Although the ratio improved slightly in 2021 and 2022 to 2.13

and 2.26, respectively, suggesting a temporary recovery and restoration of solvency, the improvement was not sustained. The solvency margin declined again in 2023, 2024, and 2025 to 1.79, 1.29, and 1.01, respectively, all below the benchmark. This persistent decline indicates renewed financial distress and heightened risk of insolvency among the firms (NSE, 2025; IRA, 2025). These trends demonstrate that while insurance firms have experienced intermittent periods of financial stability, they have largely struggled to maintain the required solvency levels, thereby reinforcing concerns about deteriorating financial health and increasing distress within the sector (NSE 2025; IRA 2025). Despite the severity of the problem, empirical research on liquidity risk management and financial distress among listed insurance firms in Kenya remains limited. Prior studies have focused mainly on commercial banks and microfinance institutions (Simatwa, 2021; Ambetsa, 2023; Otieno, Kithinji & Miluwi, 2025); yet insurance firms operate under unique long-term risk, regulatory, and investment frameworks. There is limited evidence on how liquidity risk management influence distress among listed insurers. Therefore, this study sought to address this gap by examining the influence of liquidity risk management on the financial distress of insurance firms listed at the NSE.

Objectives of the Study

The objective of the study was to determine the influence of liquidity risk management on financial distress of insurance firms listed at Nairobi Security Exchange, Kenya

LITERATURE REVIEW

Theoretical Review

This section provided the theory that was applied to anchor the study.

Liquidity Preference Theory

Liquidity preference theory was developed by Keynes in 1936. The theory explains why individuals prefer holding liquid assets (cash or near-cash assets) because of uncertainty about the future (Alim, Ali & Melta, 2023). According to Keynes, people hold money for three main motives: transaction motives (to facilitate everyday spending), precautionary motives (to meet unexpected expenses), and speculative motives (to take advantage of future changes in interest rates or asset prices) (Chaudhary & Sapkota, 2024). The theory posits that interest rates are determined by the supply and demand for money higher liquidity preference leads to higher interest rates, as people require compensation for giving up liquidity (Nyagah, Kithinji & Mutegi, 2024).

The theory based on several key assumptions. First, it assumes that individuals are rational and risk-averse, preferring to maintain liquidity to manage uncertainty (Amira, 2023). Second, it assumes that money is the most liquid asset and is held for transactional, precautionary, or speculative purposes (Wanjiku & Assumptah, 2022). Third, it presumes that there is an inverse relationship between interest rates and the demand for money when interest rates are high, people prefer to invest rather than hold cash, while when rates are low, and they prefer liquidity. Fourth, the theory assumes that the money supply is fixed in the short run and that changes in interest rates adjust to equilibrate money demand and supply (Alim, Ali & Melta, 2023).

The theory provides a useful framework for understanding liquidity risk management and its influence on financial distress. Insurance companies must maintain sufficient liquid assets to meet policyholder claims, operational expenses, and regulatory capital requirements (Wanjiku & Assumptah, 2022). According to the theory, firms that prefer higher liquidity reduce their exposure to financial distress, as they are better positioned to handle unexpected cash outflows without resorting to costly borrowing or asset liquidation (Alim, Ali & Melta, 2023). Conversely, firms with low liquidity may face financial distress when unexpected obligations arise. Therefore, insurance firms balance liquidity preference with profitability by investing in both liquid and long-term assets (Chaudhary & Sapkota, 2024). In practice, liquidity risk management strategies such as maintaining cash reserves, managing asset-liability maturity mismatches, and stress testing,

are aligned with the principles of Liquidity Preference Theory, emphasizing the importance of maintaining adequate liquidity buffers to safeguard financial stability (Nyagah, Kithinji & Mutegi, 2024).

Despite its influence, this theory has faced several critiques. One major criticism is that it oversimplifies financial behavior by assuming that interest rates alone determine money demand, ignoring other factors such as income levels, inflation expectations, and technological changes in payment systems (Chaudhary & Sapkota, 2024). Additionally, the theory is criticized as being static, as it does not adequately account for the dynamic interaction between money markets and broader financial systems (Nyagah, Kithinji & Mutegi, 2024). Modern economists also argue that the theory fails to consider the role of financial innovations, such as credit facilities and electronic payments, which reduce the need for holding liquid cash. Moreover, in the context of modern capital markets, liquidity preferences may be influenced by institutional investors and regulatory frameworks, which Keynes did not fully consider (Amira, 2023).

Empirical Review

Alim, Ali and Melta (2023) researched on the effect of liquidity risk management on financial performance of commercial banks in Pakistan. The study is based on financial information consolidated data of listed banks in Pakistan in the Pakistan Stock Exchange and State Bank of Pakistan database for a period of 14 years. The study found that higher liquidity increases banks' performance in commercial banks of Pakistan. The study concluded that there is a positive effect of maintaining liquidity on the performance of the banks in Pakistan. This study was conducted in Pakistan while the current study will be conducted in Kenya hence the study findings cannot be generalized to the current study due to difference in economic development between the two countries

Chaudhary and Sapkota (2024) investigated on the effect of liquidity risk management on financial performance of commercial banks in Nepal. This study is based on secondary source of data. Out of the 26 commercial banks 10 banks are selected as sample by using convenience sampling method. The study found that bank size, liquidity management ratio and capital ratio has a positive effect on banks financial performance and investment ratio, and assets quality has negative effect on banks financial performance. The study concluded that liquidity risk management is an important predictor for the financial performance of commercial banks. This study failed to show the influence of liquidity risk management on financial distress of insurance firms listed at Nairobi Securities Exchange, Kenya.

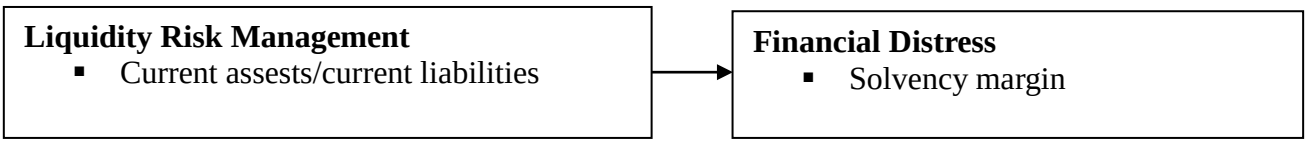
Nyagah, Kithinji and Mutegi (2024) examined on the effect of liquidity risk management on financial performance of commercial banks in Kenya. The study adopted descriptive research. The target population was 47 senior management, 128 middle management and 303 lower management employees working in the Commercial Banks' headquarters in Nairobi. The study found that liquidity risk management positively influenced the financial performance of commercial banks in Kenya. The study concluded that liquidity risk management is a crucial determinant of financial performance for commercial banks in Kenya. This study failed to show the influence of liquidity risk management on financial distress of insurance firms listed at Nairobi Security Exchange, Kenya

Amira (2023) conducted a study on the influence of liquidity risk management on financial performance of commercial banks in Kenya. The study incorporated both explanatory and longitudinal research designs into its methodology. The study's target population consisted of 32 Commercial Banks in Kenya. The study found that liquidity risk management had an insignificant negative relationship with ROE and ROA. The study concluded that liquidity risk management has a negative effect on financial performance measure in either ROA or ROE. This study focused on financial performance of commercial banks while the current study focused on financial distress of insurance firms hence, the study findings cannot be generalized to the current study due to difference in institutional frameworks between the two sectors.

Wanjiku and Assumptah (2022) researched on the effects of liquidity risk management on performance of commercial banks in Meru Town, Kenya. This study adopted descriptive research. The target population in this study comprised of the branch managers, operations managers and credit officers working in all the 24 commercial banks in Meru Town totaling to 72 respondents. The study found that liquidity risk management affected the performance of commercial banks. The study concluded that positive and significant relationships between liquidity risk management and performance of commercial banks. This study focused on performance of commercial banks while the current study focused on financial distress of insurance firms hence the study findings cannot be generalized to the current study due to difference in institutional frameworks between the two sectors

Conceptual Framework

A conceptual framework is an assumed model that aids in the identification of study concepts as well as their interactions with one another (Mugenda & Mugenda, 2019).



Independent Variable **Dependent Variable**

Figure 1: Conceptual Framework

METHODOLOGY

Research Design

This study adopted a descriptive research design. A descriptive research design was suitable for this study since it aims to describe the characteristics of a population, situation, or phenomenon in an accurate and systematic way (Orodho, 2003).

Population of the Study

The choice of the target population is crucial because it ensures that the research findings are both relevant and applicable to the context under investigation. In this study, the target population comprised of all the 6 insurance firms listed under the insurance Sector of the market segment at the Nairobi Securities Exchange.

Census

In this study, the census consisted of all six (6) Insurance firms listed at the Nairobi Securities Exchange (NSE) as at December 2025. Census was used since the population size of the firms is small, unique, and play a critical role in influencing the variables under study in this case.

Data Collection Instruments

This study relied exclusively on secondary data that was collected by use of a secondary data collection sheet. Secondary data was used since it is cost-effective and time-efficient, allowing the researcher to access a large volume of structured and standardized information (Creswell, 2014).

Data Processing and Analysis

The process began with data preparation, which involved checking for completeness, consistency, and accuracy of the secondary data retrieved from the audited financial statements and investment reports of the five listed investment firms. The data was then be coded and entered into the Statistical Package for the Social Sciences (SPSS) version 25.0, which was used to perform statistical analysis. Quantitative data will be analyzed using descriptive and inferential statistics. Descriptive statistics included means, frequencies, standard deviations and variances. Inferential analysis included correlation and panel regression analysis. The panel regression model to be used was as follows:

$Y=\beta_0+\beta_1 X_{1it}+\varepsilon$ ……Equation 1

Y_{it} represent financial distress

β_0 represent Constant term

β_1 represent Coefficient of the independent variable

X_1 represents Asset Management

$_{it}$ represents Firm i in time t

ε represents an error term.

FINDINGS AND DISCUSSION

Descriptive Statistics Results

Descriptive statistics provide a preliminary overview of the distributional characteristics of the study variables before inferential analysis is conducted.The descriptive statistics are presented in Table 1.

Table 1: Descriptive Statistics Results

Statistics	N	Min	Max	Mean	SD	Skewness	Kurtosis
Financial Distress	60	1.3224	2.8154	1.7453	0.4940	0.4772	-0.7888
Liquidity Risk Management	60	0.6689	0.8125	0.6979	0.0708	0.3558	-0.97551

Financial distress recorded a minimum value of 1.3224 and a maximum value of 2.8154, indicating substantial variation in the financial stability of insurance firms listed at the Nairobi Securities Exchange over the study period. The mean value of 1.7453 indicates that, on average, insurance firms operated below the recommended solvency margin benchmark of 2, suggesting the presence of financial distress within the sector. This implies that firms have inadequate capital buffers to absorb financial shocks, thereby increasing their vulnerability to insolvency risk. The findings support the study's problem statement, which confirms that some firms are experiencing severe financial distress. The standard deviation of 0.4940 indicates moderate dispersion, implying that although some firms maintain stability, others are experiencing higher levels of distress. The skewness of 0.4772 indicates a moderate positive skewness, suggesting that most firms cluster around lower distress levels, while a few firms experience relatively higher distress. According to George and Mallery (2010), skewness values between −2 and +2 are considered acceptable for normality in social sciences. The kurtosis of −0.7888 indicates a platykurtic distribution, meaning the data is relatively flat with fewer extreme observations. As noted by Kline (2011), kurtosis values within the range of −7 to +7 are acceptable for normality.

Liquidity risk management, measured using the current ratio, recorded a minimum value of 0.6689 and a maximum value of 0.8125. This narrow range suggests that insurance firms exhibit limited variation in their short-term liquidity positions over the study period. The mean value of 0.6979, or less than 1, indicates that firms have insufficient current assets to fully cover their short-term liabilities. Therefore, the average value of 0.6979 implies that insurance firms are operating with liquidity constraints, exposing them to liquidity risk and potential financial distress, especially in periods of high claim settlements or unexpected cash outflows. The standard deviation of 0.0708 indicates low dispersion, suggesting that most firms cluster closely around the mean. This implies that liquidity challenges are widespread across the sector, rather than being isolated to a few firms. The skewness of 0.3558 indicates a slight positive skewness, falling within the acceptable threshold of −2 to +2 as recommended by George and Mallery (2010). This suggests that while most firms maintain relatively low liquidity levels, a few firms hold comparatively higher current ratios. The kurtosis of −0.9755 indicates a platykurtic distribution, meaning the data is relatively flat with fewer extreme observations. According to Kline (2011), this suggests a stable distribution with limited outliers in liquidity positions.

Trend Analysis

Trend analysis was conducted using yearly averages to examine the financial behavior and performance of NSE-listed insurance firms over the period 2016 to 2025, to identify systematic patterns and structural changes.

Trend Analysis for Financial Distress

This section presents the trend analysis of financial distress for insurance firms listed at the Nairobi Securities Exchange over the period 2015–2025.

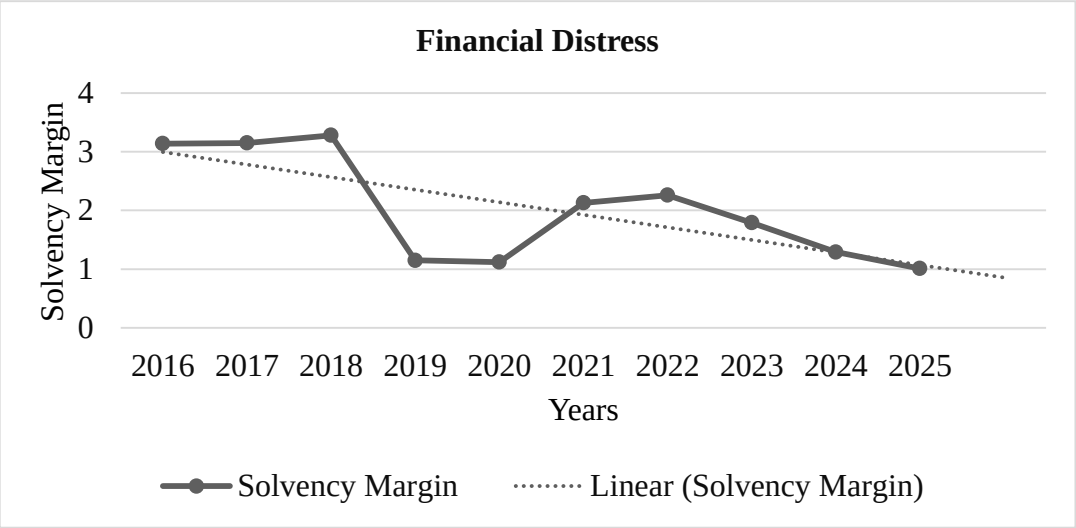


Figure 2. Trend Analysis for Financial Distress

The trend analysis of financial distress, proxied by solvency margin, reveals a generally declining pattern, indicating a progressive increase in financial distress among insurance firms over the study period, particularly during periods where the ratio falls below the regulatory benchmark of 2. In 2016, 2017, and 2018, the solvency margin ratios were relatively high at 3.1, 3.1, and 3.3, respectively. These values are well above the recommended threshold of 2, indicating that firms maintained strong financial positions, with adequate capital buffers to absorb potential shocks and meet policyholder obligations. However, a sharp decline is observed in 2019 and 2020, where the solvency margin dropped significantly to approximately 1.15 and 1.12, respectively. These values fell below the benchmark of 2, clearly indicating financial distress, as firms lacked sufficient capital buffers and were increasingly vulnerable to insolvency risk.

A temporary recovery is noted in 2021 and 2022, where the solvency margin improved to 2.1 and 2.2, respectively. These values are slightly above the threshold, suggesting a short-lived restoration of financial stability. However, the recovery was not sustained. From 2023 onwards, the solvency margin declined again, falling to approximately 1.8 in 2023, 1.3 in 2024, and further to 1.0 in 2025. All these values are below the regulatory benchmark, indicating renewed and worsening financial distress. The continuous decline toward 1.0 in 2025 signals severe financial vulnerability, where firms are increasingly unable to meet long-term obligations.

The linear trend line reinforces this observation by showing a clear downward trajectory, suggesting that despite intermittent improvements, the overall solvency position of insurance firms has been deteriorating over time. Overall, the findings indicate that insurance firms listed at the Nairobi Securities Exchange are experiencing increasing financial distress, particularly in periods where the solvency margin falls below the threshold of 2. The persistent occurrence of these sub-threshold values highlights systemic weaknesses in

financial management, supporting the study's problem statement that the sector faces ongoing solvency challenges and heightened risk of insolvency.

Trend Analysis for Liquidity Risk Management

This section presents the trend analysis of liquidity for insurance firms listed at the Nairobi Securities Exchange over the period 2015–2024.

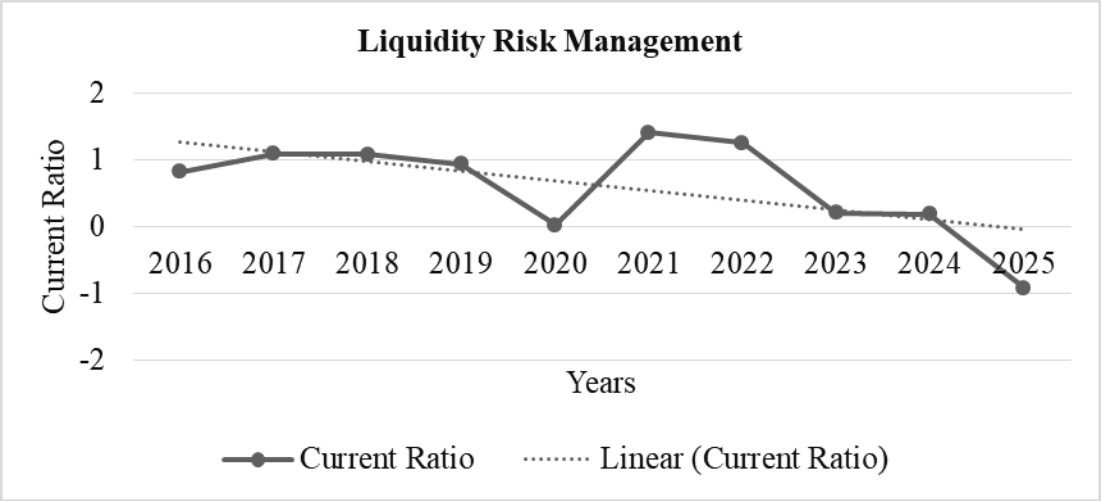


Figure 3. Trend Analysis for Liquidity Risk Management

The trend analysis of liquidity risk management, proxied by the current ratio (current assets/current liabilities), reveals a generally declining and highly volatile pattern, indicating a progressive deterioration in liquidity positions and increasing exposure to financial distress among insurance firms over the study period. In 2016, the current ratio stood at 0.8, which is below the acceptable benchmark of 1, indicating that firms had insufficient current assets to meet short-term obligations, thereby exposing them to liquidity risk. This position improved slightly in 2017 and 2018, where the ratio increased to about 1.1, suggesting that firms were temporarily able to meet their short-term liabilities, reflecting an improvement in liquidity management. However, in 2019, the ratio declined to approximately 0.9, falling again below the benchmark, indicating renewed liquidity pressure.

The situation worsened significantly in 2020, when the current ratio dropped sharply to 0.1, suggesting severe liquidity constraints, where firms were unable to cover their short-term obligations. A temporary recovery is observed in 2021, where the current ratio increased to approximately 1.4, indicating a strong liquidity position and improved ability to meet short-term obligations. This improvement, however, was short-lived, as the ratio declined in 2022 to about 1.2, although still above the benchmark. From 2023 onwards, the liquidity position deteriorated sharply. The current ratio dropped significantly to 0.2 in 2023 and remained low in 2024, indicating that firms were once again operating under serious liquidity constraints. The situation became critical in 2025, when the ratio declined further to −1.0, indicating extreme liquidity distress, where current liabilities significantly exceeded current assets.

The linear trend line confirms a downward trajectory, suggesting that despite intermittent improvements, the overall liquidity position of insurance firms has been deteriorating over time. Overall, the findings indicate that insurance firms listed at NSE are experiencing worsening liquidity conditions, as evidenced by the declining current ratio and increasing volatility. The inability to maintain a stable liquidity position exposes firms to short-term financial distress, particularly in meeting claims and other obligations. Linking these findings to the study's problem statement, the observed deterioration in liquidity management highlights persistent weaknesses in financial management practices, which may contribute significantly to financial

distress within the insurance sector. Further fluctuations suggest that firms lack consistent liquidity strategies, thereby increasing their vulnerability to financial shocks.

Inferential Statistics

Inferential statistics were employed to examine the relationship between asset and liability management and financial distress of insurance firms.

Correlation Analysis

The findings, summarized in Table 4, highlight the strength and direction of the relationship between the two variables.

Table 2: Pearson Correlation Analysis Result

Correlation	Finacial Distress	Liquidity Risk Managemet
Finacial Distress	1.000	
Liquidity Risk Management	-0.618***	
Sig. (2-tailed	0.000	1.000
N	50	50

The correlation analysis revealed a negative correlation between liquidity risk management and financial distress ($r = -0.618$, $p < 0.01$). The results imply that firms with stronger liquidity positions experience lower distress levels.This also suggests that improvements in liquidity management are associated with slight reductions in financial distress. The findings relate to Bawa et al. (2020), who reported that stronger liquidity positions significantly reduce insolvency risk among insurance firms, emphasizing that adequate liquidity buffers enhance institutional resilience and reduce vulnerability to financial shocks. Similarly, Mwangi (2023) found that liquidity management was negatively associated with financial distress among Kenyan financial institutions.

Model Summary

The model summary presents the overall explanatory power of the regression model.

Table 3: Model Summary Result

Model	Multiple R	R Squared	Adjusted R Square	S.E. Regression	Obs
1	0.788	0.621	0.592	0.182	60

The results in Table 3 show that the regression model produced a correlation coefficient (R) of 0.788, indicating a strong positive relationship between the independent variable and financial distress of the insurance companies. The coefficient of determination (R^2) of 0.621 implies that approximately 62.1% of the variation in financial distress among the companies can be explained by the variable.This suggests that liquidity risk management play a significant role in influencing performance of the insurance firms. The remaining 37.9% of the variation in ROA is explained by other factors not included in the model.

The adjusted R^2 value of 0.592 further confirms the robustness of the model after adjusting for the number of predictors used in the regression. Adjusted R^2 provides a more reliable estimate of explanatory power since it accounts for possible inflation of the R^2 value when additional variables are included in the model. The adjusted R^2 of 0.592 suggests that after adjusting for the number of predictors, the model still explains approximately 59.2% of variations in financial distress. Additionally, the standard error of the estimate (0.182) indicates a relatively small difference between the observed and predicted values of financial distress, suggesting that the regression model provides reasonably accurate predictions of financial distress.

Analysis of Variance (ANOVA) Results

The Analysis of Variance (ANOVA) test was conducted to determine the overall statistical significance and fitness of the regression model used.

Table 4: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig	Obs
Regression	14.962	4	3.741	18.742	0.000	60
Residual	10.958	55	0.199			
Total	25.920	59				

The ANOVA results indicate that the regression model is statistically significant. ($F = 18.742$, $p < 0.000$) The model produced an F-statistic of 18.742 with a p-value of 0.000, which is less than the 0.05 significance level. This implies that liquidity risk management has a statistically significant effect on the financial distress of insurance firms listed at the NSE, Kenya. Therefore, the null hypothesis that the independent variable do not influence financial distress is rejected.

Regression Coefficient Results

The Fixed Effects model accounts for unobserved firm-specific heterogeneity, allowing the analysis to control for time-invariant characteristics unique to each firm while examining the influence of liquidity risk management on financial distress.

Table 5: Regression Coefficients Results

	Coefficient B	Std Error	t-Statistic	Sig	95% Conf. Interval	
(Constant)	1.284	0.287	4.474	0.000	0.722	1.846
Liquidity Risk Management	-0.317	0.097	-3.264	0.002	-0.507	-0.127

The panel regression equation based on the fixed effect regression coefficients is presented as;

$$Y = 1.284 - 0.317X_{it}$$

Hypotheses Test Results

The objective of the study was to establish the effect of liquidity risk management on the fianacial distress of insurance firms listed at the NSE kenya. The null (H_0) hypothesis stated that liquidity risk management has no significant influence on financial distress of insurance firms listed at Nairobi Security Exchange, Kenya. The findings in Table 4.13 indicate that liquidity risk management had a coefficient value of $\beta = -317$ and $p = 0.002$. The results imply that holding other factors constant a unit increase in liquidity risk management will reduce the financial distress of insurance firms by 0.317units. The increase will be significant given the p-values of 0.002 ($P>0.05$). Therefore, the null hypothesis (H_{01}) is rejected. This finding has the implication that strong liquidity positions enable firms to meet short-term obligations without resorting to costly borrowing or asset liquidation. The findings are supported by those of Mwangi (2023),and Bawa et al. (2020), who found that liquidity management significantly improves financial stability among Kenyan financial institutions.

CONCLUSIONS AND RECOMMENDATIONS

The study established that liquidity risk management had a negative and statistically significant effect on financial distress. Correlation results similarly indicated a strong negative relationship between liquidity risk management and financial distress. The findings indicate that insurance firms with stronger liquidity management practices experience lower levels of financial distress. Adequate liquidity enables firms to meet short-term obligations, settle claims promptly, and withstand unexpected financial shocks without

compromising operational stability. The findings show that strong liquidity positions enable firms to meet short-term obligations without resorting to costly borrowing or asset liquidation.The findings further suggest that liquidity management significantly improves financial distress.

The study concludes that liquidity risk management plays a significant role in reducing financial distress. It enhances the financial performance of the insurance companies. Liquidity management enables firms to operate efficiently and minimize reliance on external costs. Insurance firms with adequate liquidity reserves are better able to meet policyholder obligations and withstand unexpected financial pressures. Consequently, effective liquidity management enhances organizational resilience and financial sustainability. Firms that maintain adequate liquidity are better positioned to effectively manage their operational cash flows, meet short-term financial obligations, and sustain project implementation without disruptions.

Insurance firms should establish robust liquidity management policies aimed at maintaining optimal liquidity levels capable of supporting operational and claims obligations. The firms should maintain liquidity reserve levels that are able to with-stand market volatility. Management should regularly monitor liquidity ratios and conduct stress-testing exercises to assess their ability to withstand adverse financial conditions. The Insurance Regulatory Authority should strengthen liquidity monitoring requirements and encourage periodic liquidity risk assessments.

Suggested Area for Further Research

The study provided an indepth analysis of liquidity risk management on the financial distress of insurance firms listed at the NSE. Kenya. There however exists areas that can be explored by future researchers. For instance, the study established that the explanatory variable accounted for a substantial proportion of the variation in financial performance, as indicated by the coefficient of determination (R^2) (62.1%). However, the model indicates that a portion of the variation in financial performance remains unexplained (37.9 %). This implies that other may influence the financial distress of firms within the insurance sector. Future studies should therefore investigate additional determinants such as firm size, claims ratio, capital adequacy, inflation rates and so on.

Future research should also consider extending the study period and including non-listed insurance firms to improve generalizability of findings and to determine if the relationship identified in the study applies across other firms. The study should also be carried out across different financial sectors like saccos, commercial banks so as to determine and comapare whether the relationship cuts across. Additionally, The study shouls be carried out in a different geographical location using a different methodological approach.

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