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Abstract

This study sought to assess the mediating effect of market liquidity risk on the relationship between systematic risks and stock market return volatility among firms listed at the NSE, Kenya. Volatility in the stock market in Kenya has been on the rise in the recent years. Further, research gaps exist in the literature in the Kenyan context which creates the need to undertake this research. The study was anchored on positivism philosophy supported by correlational research design. The target population was all 62 NSE listed companies listed between 2014 and 2024. Secondary data was gathered using record sheet. The data was gathered from NSE, KNBS, CMA and world bank reports. The data was analyzed through timeseries moderating multiple regression model. Further, descriptive statistics were utilized to show how the variable were. The analysis showed that on the effect of systematic risks on market liquidity, the lagged systematic variables showed statistically insignificant coefficients ($p > 0.05$). Therefore, systematic risks had no significant mediating effect on market liquidity risk. After including market liquidity as a predictor of stock market volatility alongside systematic risks, lagged market liquidity risk yielded a negative but statistically insignificant coefficient ($\beta = -0.0352$, $p = 0.459$). Therefore, effect of the mediator on stock market return volatility was not significant. This showed that market liquidity risk had no mediating effect on the relationship between systematic risks and stock market return volatility. The study concludes that market liquidity risk had no significant mediating effect on the relationship between systematic risks and stock market return volatility of firms listed at the NSE Kenya. The study recommends that the Capital Markets Authority (CMA) and NSE implement reforms to boost market depth and liquidity. The CMA and NSE should also prioritize broadening market participation through targeted investor education programs, which would help cultivate a more diverse and active investor base. Additionally, automating trade processes is strongly suggested as a means of improving execution efficiency and reducing friction in price discovery, particularly during periods of market stress.

Keywords: Market liquidity risk, systematic risks, stock market return volatility, firms, Nairobi Securities Exchange, Kenya

1.0 Introduction

Market liquidity risk is markets participants capability to perform trades with minimal or no costs, inconvenience, or any risks. Nevertheless, market liquidity risk is capability faced by market participant when they attempt to execute a trade or to sell a position (Naik & Reddy, 2021). Market participants must recognize the consequences of trading in markets that are always not liquid, that is, markets in which they cannot sell positions at prevailing market prices. When the market is turbulent, the market participants need to assess and manage their liquidity risk effectively (Schwartz & Peng, 2021). There are various approaches to assessing liquidity risk. These estimation methods vary in their complexity, degree of sophistication and implementation complexity (Pasricha & He, 2023). The selection of this method used is determined by accessibility of data, level of sophistication required and specific needs by the researching institution.

Certain methods are designed to estimate endogenous market liquidity that is the liquidity is inherent within a market, while others focus on exogenous liquidity where the liquidity is influenced by external market factors like global market trends and macro-economic conditions. The methods used should align with the identified characteristics of market liquidity risk, the models used should be adjusted using real or empirically plausible data and that the methods undergo stress teste (Abankwa & Blenman, 2021). Market liquidity risk is assessed through various ratios and measures. The bid ask spread is a fundamental measure, indicating gaps between smallest price a seller is prepared to take and the maximum amount a buyer is ready to pay (Qudah et al., 2021). A narrower spread signifies improved liquidity, as it represents reduced transaction costs as well as greater markets depth. Markets depth, which examines number of buys and sells orders at various pricing levels, provides an understanding of the volume available for trading without significantly affecting prices (Ryu, Webb & Yu, 2022).

Market depth is measured through volume to market capitalization ratio. Trading volume, that represent total quantities of an asset trading over a specific timeframe, generally correlates with higher liquidity, indicating active market participation. Another important measure is the turnover ratio, which compares the trading volume to the total shares outstanding, offering a normalized view of trading activity relative to the asset size (Ranaldo & de Magistris, 2022). The price impact measure evaluates how much an asset's price changes in response to a specific trade size, directly indicating liquidity by showing the cost of executing large trades. The Amihud illiquidity ratio combines price impact with trading volume, measuring the average price change per unit of trading volume, thus providing a comprehensive view of liquidity (Schwartz, Francioni & Weber, 2020). Additionally, high frequency measures analyse intraday data at very short intervals to capture real-time liquidity variations, though these require access to detailed and high-frequency trading data.

Market liquidity risk signified mediating variable as measured by volume-to-markets capitalization ratios. It was preferred as a measure of market liquidity risk primarily due to its ability to provide a standardized perspective on trading activity relative to the size and value of a market or asset. By providing a standardized view of liquidity, VMCR support investors in gauging market dynamic forces, identifying trading opportunities, and manage liquidity risk more effectively in their investment decisions. A low VMCR indicates risks associated with market depth, requiring a greater caution when employing different trading strategies.

As systematic risks increase, market liquidity risk intensifies, characterized by wider bid-ask spreads, reduced trading volumes, and decreased market depth (Dziwok & Karas, 2021). The deterioration in liquidity exacerbates the potential for stock market volatility as investors find it increasingly challenging to execute trades at favourable prices. Illiquidity amplifies the

impact of market shocks, leading to larger price swings and heightened volatility (Hu, Li & Liu, 2020). Consequently, the link around systematic risk and stock markets volatility becomes mediated by market liquidity risk. During times of elevated systematic risks, the indirect effect on stock market volatility through market liquidity risk becomes pronounced. The deterioration in liquidity amplifies the impact of systematic risks on volatility, as constrained liquidity exacerbates the price impact of trading activities, leading to sharper and more unpredictable market movements (Naik & Reddy, 2021). Conversely, when systematic risks subside or market liquidity risk improves, the influence on stock market volatility tends to diminish as trading becomes more orderly and efficient.

1.1 Problem Statement

Systematic risks play a key role in stock market volatility. When systematic risks increase, such as during economic downturns or geopolitical tensions, they can amplify stock market volatility as investors reassess risk and adjust their portfolios accordingly (Rizwan, Ahmad & Ashraf, 2020). On the other hand, market liquidity risk contributes to stock market volatility because it amplifies the impact of buying and selling pressures on stock prices (Naik & Reddy, 2021). A lack of liquidity can lead to abrupt price swings and heightened volatility, especially in smaller or less actively traded stocks on the NSE. The studies showed various research gaps based on the concepts, contexts, and research methodologies. Amata (2017), for example, examined how macroeconomics variables influence stock markets volatilities in Kenya. The study looked at differing variables other than mediating effect of market liquidity risk on the relationship between systematic risk and stock market volatility. For this study, market-wide herd index was adopted as the mediating variable other than market liquidity. This shows that conceptual gaps exist in the study. Further, the research methodologies brought about more gaps. For instance, the study adopted VECM model and xvii causality tests instead of timeseries regression modelling

1.2 Objective

The objective of the study was to assess the mediating effect of market liquidity risk on the relationship between systematic risks and stock market return volatility among firms listed at the NSE Kenya

2.0 Literature Review

The literature review presents the theoretical, empirical, and conceptual foundations of the study. It discusses relevant theories, reviews existing empirical studies, and outlines the conceptual framework guiding the research.

2.1 Theoretical Literature

This study was anchored on the arbitrage pricing theory propagated by Ross (1976) establishes in what way assets are valued based on their connected risks (Amata, 2017). The APT posits that a linear correlation between an asset's anticipated earnings and macroeconomic factors influencing its vulnerability can be utilised for predicting its earnings. Proponents argue that APT better captures the complexities of asset pricing by allowing for multiple sources of systematic risk, reflecting real-world market conditions more accurately. While CAPM suggest that expected returns or security prices are associated with a single common factor, APT is driven by multiple factors that represent important risks in asset return. The multiple influencers give risks premiums for the investor to take into consideration. The influences consist of systematic risks.

Arbitrage pricing theory assumes that asset pricing is influenced by numerous aspects, each representing a distinct source of systematic risk (Renault, Van Der Heijden and Werker, 2023). These factors could include economic variables such as interest rates, inflations rates, and GDP

growth, among others. APT posits that these factors collectively drive asset returns and that investors adjust their portfolios to account for the sensitivities (factor loadings) of assets to these factors. The theory also maintains that markets are efficient, which implies that arbitrage opportunities are quickly utilized, resulting to asset prices that incorporate all available information and adjust to changes in underlying factors swiftly (An, 2023). By incorporating multiple sources of systematic risk, APT provides a robust framework for understanding how these factors contribute to asset price variability and, by extension, to fluctuations in stock market volatility.

Despite its strengths, Arbitrage Pricing Theory (APT) faces criticism primarily regarding its application and empirical testing. Critics argue that identifying and quantifying the specific factors that drive asset returns can be challenging and may vary across different market conditions (Poncet & Portait, 2022). APT relies on the assumption that the factors influencing asset prices can be accurately identified and their impacts adequately measured, which may not be practical. Moreover, the theory does not provide clear guidelines on how to establish appropriate factors for inclusion in model or their precise definitions, leading to ambiguity in model specification (Hussein & Mohammed, 2023). Additionally, APT's reliance on linear relationships between asset returns and factors may oversimplify the nonlinear nature of market dynamics, potentially limiting its ability to fully capture the complexities of asset pricing and systematic risks in real-world financial markets (Akel & Cisse, 2023). These criticisms underscore the importance of careful model construction and empirical validation when applying APT to analyze and predict asset price movements and market volatility.

The APT theory was key in this study as it is based on multiple systematic factors affecting stock market returns. APT considers multiple systematic factors that can impact asset returns, such as interest rates, inflation expectations, and sector-specific risks. This approach allowed analysts to dissect the sources of volatility in financial markets more comprehensively, understanding how changes in these factors can lead to price adjustments across asset classes. By identifying and quantifying these factors, APT helps investors and researchers alike to better grasp the underlying drivers of market volatility and to develop more effective risk management strategies tailored to different economic scenarios and market conditions. This theory is applicable to market liquidity risk because it considers factors beyond systematic risk factors (captured by beta in MPT) that can affect asset prices, including liquidity risk. APT posits that asset prices are influenced by multiple factors or 'arbitrage opportunities,' which can include liquidity factors such as bid-ask spreads, trading volumes, and market depth.

2.2 Empirical Literature

Abo El-ata (2023) looked at the mediating role of stock market liquidity on the relationship between investor sentiment and stock market volatility among Listed Companies in Egyptian Stock Exchange. The study adopted a positivism philosophy quantitatively method. Data were gathered from EGX 100 companies, excluding statements from banks and financial institutions. The samples included 305 observations from 76 firms focusing on the consolidated financial statement. The data analysis involved Dick-Fuller test to assess stationarity and GARCH model to analyse volatility. Descriptive and correlation coefficients were utilized. The research model was validated using structural equation modeling (SEM). Market liquidity drove volatility in stocks markets and exchange rate.

Stereńczak (2024) explored correlation around liquidities and stocks volatilities by considering mediating effect of investors' holding periods in Europeans. The research study utilised data from stocks traded on fourteens exchanges in Eastern Europe. Study examined how stock returns correlate with variously transformed liquidity measures to account for clienteles' effects within the liquidity-returns dynamic. The Findings indicated that investors' holding periods

plays a mediating role in illiquidity - returns relationships in CEE markets revealing that the liquidity premiums in these markets was empirically substantial. Jawadi *et al* (2021) examined liquidity risk and volatility in stocks markets amid COVID 19 pandemic. The study utilised various data set. It employed robust linear and nonlinear regressions. Outcomes indicated that liquidity and volatilities displayed significant time variability. Additionally, the study found that the rates of contamination and mortality associated with the pandemic nonlinearly influenced markets trading, liquidities, and volatilities, highlighting a pronounced reactions of stocks markets to COVID 19 related external information and demonstrating the inefficiencies of such markets.

Kocaarslan and Soytas (2021) explored effects of funding liquidity related risks on volatilities of stocks portfolios amid COVID 19 pandemics. The quantile regression technique was used in the study. After adjusting for macroeconomic variables, the investigation found that high-risk portfolios' volatility tends to rise more sharply than that of less risky portfolios when funding liquidity circumstances deteriorate. More significantly, during times of extreme volatility in high-risk portfolios, this increase becomes more pronounced, suggesting that the effects are more pronounced during erratic economic times, such those caused by the COVID 19 pandemic. Amata (2017) examined impact of macroeconomics aspects on stock markets volatilities in Kenya exploring mediating effects of markets liquidity. Investigation utilized descriptive researching methodology on listed firms 2001 to 2014. The study outcomes indicated that while market liquidity risk had no causal link to stocks market volatilities, it played a significant mediating role. Overall, market liquidity risk was shown to be a mediating factor.

2.3 Conceptual Framework

Figure 1 illustrates the conceptual framework of the study.

Independent Variables

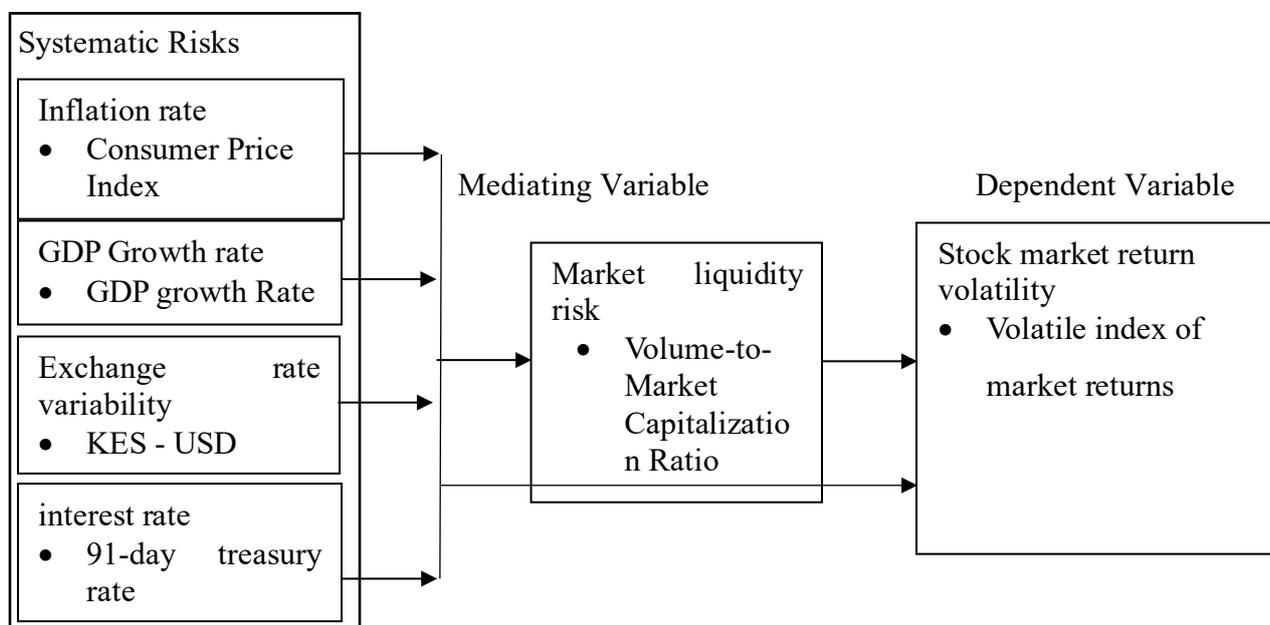


Figure 1: Conceptual Framework

Source: Ngugi et al. (2026)

3.0 Methodology

The methodology entails the following sections: research philosophy and design, population, data collection methods, data analysis techniques, and the empirical model. These components outline the overall approach adopted in conducting the study.

3.1 Research Philosophy and Design

This study embraced positivist philosophy, which is a philosophical approach that stresses the importance of empirical data and scientific methods. Positivism as a research philosophy was justified in this research due to various strongholds. Employing numerical methodologies facilitates statistical examination, enabling researcher to identify patterns and establish causal relationships between systematic risks and market volatility (Pawlikowski, Rico & Van Sell, 2018). Moreover, by aiming for generalizability, findings can extend beyond individual cases to potentially inform broader market dynamics. In relation to the above assumptions of the philosophy, this study utilized positivism to explore the link around systematic risks and stocks markets returns volatility in Kenya. Philosophy informed testing of hypotheses and the generalization of statistical findings. Additionally, it prioritized objectivity, as it relied on scientific methods for examining relationships within the investigation. Moreover, the study used a correlational research approach to explain how systematic risks affect the volatilities of stock markets returns for Kenyan publicly traded enterprises. The goal of correlational research design was to make predictions and look into the correlations between variables. The design was used to determine, evaluate, characterize, and illustrate the connections between the determinants of systematic risk which impact the volatility of the Kenyan stock market. Correlational research design identifies relationships between various researching parameters like systematic risks, market liquidity risk and stock market volatility.

3.2 Population

Targeted group included companies on the Nairobi Securities Exchange from 2014 to 2024. There were 62 listed companies as at December 2023 (NSE, 2023). The study involved listed companies since the data was readily available. The population was based on the sector of operation. The study used a census survey whereby all 62 NSE listed companies listed between 2014 and 2024. Investigation involved all the firms based on the years of listing.

3.3 Data Collection Methods

Record survey sheet was utilized for gathering data. Volatility index data like stock returns and average markets return in addition to market liquidity risk data was collected from NSE and CMA. However, data on exchange rates, GDP, inflation rates, and interest rates was gathered through CBK and World Bank. The record survey sheet had annual data for calculating the ratios. Authority by university to collected data was acquired. A license from national commission for sciences, technology and innovation (NACOSTI) also secured. Data was then sourced from websites of NSE, CMA, the World Bank, and KNBS. Research data involved a 10-year period to ensure access to the most recent information.

3.4 Data Analysis Techniques

Field-collected raw data must be transformed into information that addresses the research questions. Prior to analysis, data was cleaned before coding into STATA 15. Data analysis is crucial for understanding the data (Peck, Short & Olsen, 2020). These was achieved through descriptive statistics like frequencies, standard deviations, means, percentages and cross tabulations. For goodness of fit, Cronbach's Coefficient Alpha was utilized. To test hypotheses formulated, t and F tests were employed.

3.5 Empirical Model

Direct Effects Model

Multiple linear regression modelling features a dependent variable (Y), representing stock market volatility, along with independent variables (X). This design was adopted successfully by Chen, Xu and Yang (2021) in their study. The direct effects modelling is:

$$Y_t = \alpha + X'_t \beta + e_t \dots\dots\dots (4.1)$$

Where Y_t is the dependent variable signifying stock markets volatility at time t , t is the years, $t=2014, \dots\dots\dots, 2024$

X'_t signifies independent variables, α signify constant term, β represents regression coefficients while e_t signify the error term.

The equation 3.3 was expanded:

$$MV_t = \alpha + \beta_1 CPI_t + \beta_2 GDP_t + \beta_3 FX_t + \beta_4 IR_t + e_t \dots\dots\dots (4.2)$$

Where;

MV_t is stock market volatility as measured by volatile indeces

CPI_t = inflation rate represented by consumer price index at time t

GDP_t =GDP growth rate at time t

FX_t = KES - USD at time t

IR_t =interest rates at time t

$\beta_1 - \beta_5$ = Regression coefficient

e = Error term

Mediating Effects Model

The researcher undertook a regression where X (predictor) variables influence M (mediating variable). A meditating variable transmits effect of predictors to dependents. They were adopted as mediating variable. In this study, the predictors affected the mediating variable which then influenced dependent variable (stock markets volatility). First equation (1) involved effect of the predictors on mediating variable:

$$M_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e$$

Second equation involved mediating variable as a predictor of dependent variable:

$$MV_{it} = \beta_0 + \beta M_{it} + e$$

4.0 Result and Findings

The results and findings section incorporates descriptive analysis, regression analysis, and a summary of the results. These components provide a comprehensive presentation and interpretation of the study findings.

4.1 Descriptive Analysis

Table 1 presents the descriptive statistics of the study variables.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Stocks Market Volatility	44	4.805734	2.318608	-1.40498	7.930561
Inflation Rate	44	-3.90909	19.48917	-50.97	25.88
Economic Growth Rate	44	9.305	56.79671	-45.76	280
Exchange Rate	44	0.865455	3.205264	-14.33	7.84
Interest Rate	44	-0.59068	12.46327	-39.26	31.5
Market Liquidity Risk	44	21.16386	7.07388	10.55	36.68

The stock market volatility (MV), as measured by a volatility index, recorded a mean of approximately 4.81 over the 44 observations. The standard deviation of 2.32 indicates that the volatility values clustered fairly close to the mean, though with some variability across time. The minimum value of -1.40 may be indicative of extreme downward movements in stock prices or corrections, possibly during market shocks, while the maximum value of 7.93 points to episodes of intense market turbulence. Inflation rate (CPI) reported a mean of -3.91, which is unusually negative. This could reflect either deflationary pressures or statistical treatments such as differencing or log transformation used in data preparation. The high standard deviation of 19.49 signals considerable fluctuation in price levels across the period, suggesting that inflation was far from stable. A minimum of -50.97 indicates deep deflationary episode or potential deflation in some periods. This may be due to sharp contractions in aggregate demand, currency appreciations, or falling global commodity prices. Conversely, the maximum of 25.88 suggests inflationary spikes, likely caused by cost-push pressures such as currency depreciation, supply chain disruptions, or food and fuel price volatility.

The economic growth rate, represented by GDP, exhibited a mean of 9.31, implying a generally positive trend in national output across the study period. However, the extremely high standard deviation of 56.80 reveals intense fluctuations in economic performance. The minimum value of -45.76 is indicative of a severe economic contraction, possibly driven by exogenic shockwaves like political instability or fiscal crises. The highest rate of 280 reflects either a statistical outlier or an extraordinary expansionary episode, potentially due to post-recession recovery, rebasing, or natural resource windfalls. Such a wide range between negative and extremely high positive growth suggests a highly volatile macroeconomic environment.

The exchange rate (KES/USD), which measures the relative value of KES compared to USD, had a mean of 0.87, suggesting mild appreciation over the period or potentially capturing percentage fluctuations in exchange rates through differencing. Standard deviation of 3.21 indicates significant fluctuations in the exchange rate, reflecting Kenya's exposure to external financial markets, trade balances, and monetary policy differences. The minimum of -14.33 signifies episodes of sharp appreciation, possibly linked to high capital inflows or positive terms-of-trade shocks, while the maximum of 7.84 points to significant depreciation pressures. Interest rates (91-day Treasury Bill rate), reported a mean of -0.59, which again may reflect differenced or transformed data rather than literal negative rates. Variation of 12.46 shows high volatility of interest rate movements, suggesting that the Central Bank of Kenya engaged in active monetary policy interventions. The ranges of -39.26 and 31.5 show large swings in rates, which may have occurred in response to inflation surges, exchange rate volatility, or shifts in capital flows. The extreme values indicate periods of aggressive policy easing or tightening.

Market liquidity risk had a mean value of 21.16, this was an indication that there was a significant level of risk associated with liquidity in the market, meaning that investors might

have faced challenges in buying or selling assets without impacting prices. The standard deviation of 7.07 suggests that liquidity conditions varied considerably over time, with some periods marked by tighter credit and reduced trading activity, possibly due to monetary tightening, market shocks, or reduced investor participation. The minimum value of 10.55 implies relatively liquid market conditions during some quarters, whereas the maximum of 36.68 indicates periods of heightened illiquidity, potentially coinciding with external shocks or reduced investor confidence. Liquidity risk directly impacts the ease of executing transactions, the ability of firms to raise capital, and the transmission of monetary policy. Figure 2 summarizes trends of market liquidity risk

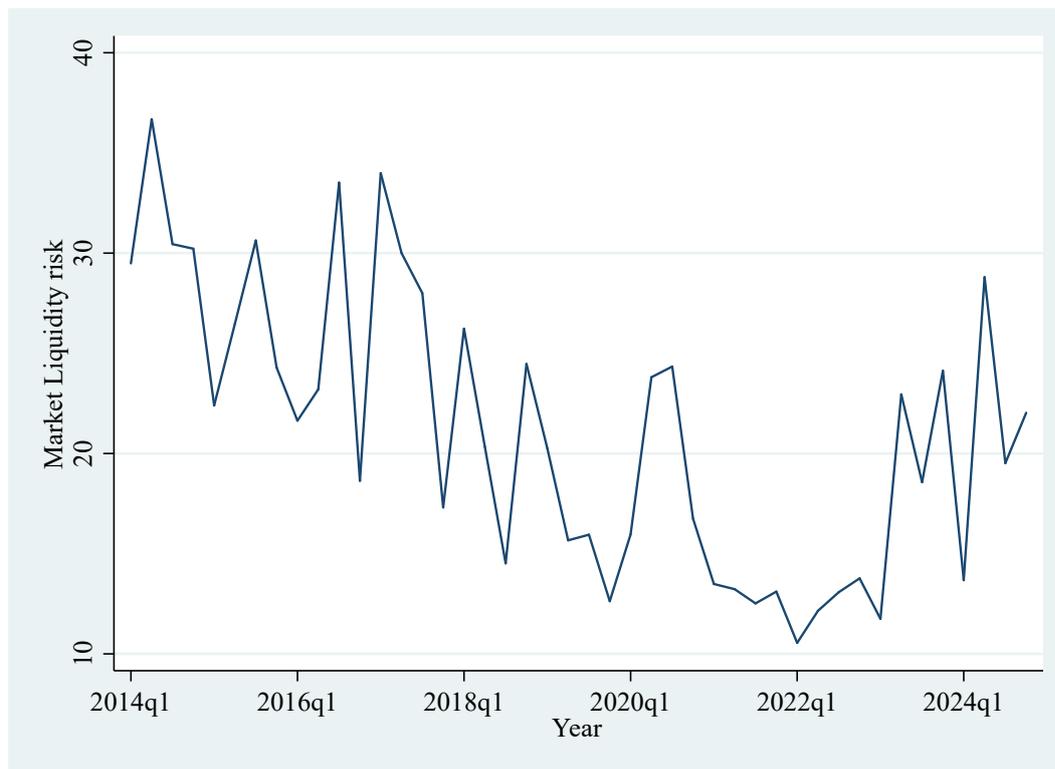


Figure 2: Movement of Market Liquidity risk

The findings in Figure 2 showed movement of market liquidity risk from 2014Q1 to 2024Q4 in Kenya. Figure 2 displayed a dynamic trend with notable shifts across different periods with market liquidity risk primarily ranging from approximately 10 to 40. In the initial years, from 2014Q1 to late 2017, market liquidity risk generally operated at higher levels, typically fluctuating between 20 and 35. This period was characterized by several peaks and troughs, but the overall level of risk remained elevated. A prominent peak was observed around mid-2017, where the risk approached 35. This suggested that, during this phase, market participants perceived liquidity to be relatively constrained or prone to disruption. A noticeable shift occurred from early 2018 through to late 2022, as market liquidity risk generally trended downwards. While intermittent fluctuations were present, including a brief peak around mid-2019, the overall trajectory indicated a reduction in perceived liquidity risk, with the metric often falling into the 15-25 range. The lowest point in this period was recorded around late 2021 to early 2022, where market liquidity risk briefly touched approximately 10. This decline could have been influenced by sustained accommodative monetary policies, increasing market depth, or improved investor confidence, leading to a perception of easier asset convertibility.

However, early 2023 to 2024Q4, indicated a resurgence in market liquidity risk. The metric began to climb again, showing increased volatility and reaching a significant peak around late

2023, approaching 30 once more. While it experienced a sharp dip after this peak, it subsequently showed signs of stabilizing at a higher level, around 20-25, by the end of 2024. This resurgence in liquidity risk could have been attributed to factors such as monetary policy tightening, increased market volatility (as seen in the stock market volatility graph), or renewed concerns about economic stability, leading market participants to anticipate greater challenges in executing large trades without significantly impacting prices.

4.2 Regression Analysis

The regression model extended the previous specification by incorporating market liquidity risk (denoted as M) as an additional explanatory variable alongside lagged values of Consumer Price Index (CPI), Gross Domestic Product (GDP), exchange rate (FX), and interest rate (IR). This enhancement aimed to test whether liquidity risk contributes to the short-term dynamics of stock market volatility (MV) in the Kenyan context. Mediating effect involves the path, IVs → M → MV where

Path A on the effect of IVs on Mediating variable (IVs → M)

Path B on the effect of mediator on DV controlling for IVs (M → MV)

Systematic risks as influencer of Market Liquidity Risk

Table 1 presents the analysis of the relationship between systematic risk and market liquidity risk. It reports the statistical results used to determine whether systematic risk significantly influences market liquidity risk.

Table 2: Systematic Risk and Market Liquidity Risk

Variable	Coeff.	P> t
L.CPI	-0.0056357	0.926
L.GDP	-0.0051337	0.791
L.FX	0.1698641	0.637
L.IR	-0.1606754	0.108
Constant	20.8420600	0.000

On the effect of systematic risks on market liquidity (IVs → M) – Path A, the lagged systematic variables showed statistically insignificant coefficients.

- β
 - L.CPI = -0.0056357
 - L.GDP = -0.0051337
 - L.FX = 0.1698641
 - L.IR = -0.1606754
- p value
 - L.CPI = 0.926
 - L.GDP = 0.791
 - L.FX = 0.637
 - L.IR = 0.108

Therefore, systematic risks had no significant effect on market liquidity risk. This suggests that, within the specified lag structure, systematic risks had no significant effect on market liquidity risk. This implies that Path A is not supported.

Market Liquidity as influencer of Stock Market volatility

Table 2 presents the regression results examining the effect of market liquidity risk and systematic risk on stock market volatility. The table shows the estimated coefficients, significance levels, and overall model fit statistics used to evaluate the strength and direction of the relationships.

Table 3: Market Liquidity Risk, Systematic Risk and Stock Market Volatility

MV	Coefficient	P-value
L1.CPI	-0.0416	0.031
L1.GDP	0.0038	0.531
L1.FX	-0.0975	0.379
L1.IR	0.0702	0.025
L1.M	-0.0352	0.459
cons	5.5442	0.000

After including market liquidity as a predictor of stock market volatility alongside systematic risks, lagged market liquidity risk (L.M) yielded a negative but statistically insignificant coefficient ($\beta = -0.0352$, $p = 0.459$). Therefore, effect of the mediator (M \rightarrow MV) – Path B

- β (L1.M) = -0.0352
- P-value = 0.459

This coefficient is not statistically significant ($p > 0.05$), meaning M does not significantly affect MV, after controlling for the IVs. This suggests that, within the specified lag structure and systematic risks, market liquidity risk had no significant influence on stock market volatility once other indicators are accounted for. This implies that Path B is not supported. Without a significant Path B, mediation cannot be claimed, even if Path A or Path C' is significant. Therefore, the mediating effect of market liquidity risk on the relationship between systematic risks and stock market return volatility was insignificant.

4.3 Summary of the Results

The findings indicated that market liquidity risk did not significantly mediate this relationship. Specifically, the indirect effect via liquidity risk was statistically insignificant, as shown by the lagged liquidity variable (L.M) having a coefficient of -0.0357 ($p = 0.459$). This suggests that once the direct effects of systematic risks were accounted for, liquidity risk did not serve as a meaningful transmission channel influencing volatility. The results imply that market volatility in Kenya is more directly shaped by macroeconomic factors themselves rather than through their influence on liquidity conditions.

5.0 Conclusion

The study assessed whether market liquidity risk mediated the relationship between systematic risks and stock market volatility. The analysis found no evidence of a significant mediating role among companies listed at the NSE Kenya. This implies that liquidity condition does not serve as a key transmission channel through which systematic risk influence stock market return volatility in Kenya. The results suggest that stock volatility in the Kenyan stock market is more directly shaped by the systematic risks themselves than by changes in market liquidity risk.

6.0 Recommendations

The Capital Markets Authority (CMA) and the Nairobi Securities Exchange (NSE) should implement comprehensive reforms aimed at boosting market depth and liquidity. Specifically,

regulators should consider reducing transaction costs to lower barriers to trading activity, as elevated costs may discourage active market participation and contribute to the liquidity constraints observed in this study. The CMA and NSE should also prioritize broadening market participation through targeted investor education programs, which would help cultivate a more diverse and active investor base. Additionally, automating trade processes is strongly suggested as a means of improving execution efficiency and reducing friction in price discovery, particularly during periods of market stress. Incentivizing market makers to maintain continuous bid-ask quotes even during turbulent periods is further recommended, as this would help sustain orderly markets and reduce the likelihood of liquidity-driven price swings.

Beyond structural market reforms, policymakers should pay closer attention to the direct macroeconomic channels through which systematic risks—including inflation, interest rates, exchange rate fluctuations, and GDP growth—shape stock market return volatility. The findings of this study suggest that these factors exert a more direct influence on volatility than previously assumed through liquidity intermediation, and as such, the Central Bank of Kenya and relevant fiscal authorities should ensure that monetary and fiscal policy frameworks remain responsive and transparent. In addition, it is suggested that regulatory bodies also consider incorporating non-systematic firm-level factors such as corporate governance standards, dividend policy, and firm profitability into their market oversight frameworks, as these variables may complement macroeconomic signals in explaining volatility patterns among NSE-listed companies.

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