LIQUIDITY FLUCTUATIONS AND THE NIGERIA'S STOCK MARKET PERFORMANCE: 1999 - 2023

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Abstract

This research empirically considered liquidity fluctuations and the Nigeria's stock market performance from 1999 to 2023. The data for crude oil prices, financial liquidity ratio, inflation rate and all-share index as a stand-in variable for Nigeria's stock market were culled from the Central Bank of Nigeria's statistical bulletin. Based on the data analyzed, using the multiple time series econometric techniques such as the descriptive statistics, augmented Dickey-Fuller unit root test, Johansen co-integration technique, error correction model, ordinary least squares technique and Granger causality test, the study evidenced positively significant connection between crude oil prices and all-share index. The outcome inferred that crude oil prices, had substantially affected the Nigeria's stock market performance for the past two decades. While financial liquidity ratio showed negative and insignificant correlation with all-share index, which inferred that financial liquidity ratio for the past two decades had adverse but with no meaningful effect on the Nigeria's stock market performance. However, inflation rate as a control variable was considered insignificant in explaining the Nigeria stock market performance under this scenario. Based on empirical findings, the study strongly advocates that government should continue to create a favorable macroeconomic environment to facilitate a steady increase in crude oil prices, as well as inject more liquidity into the stock market to continually improve the stock market performance.

Keywords: Fluctuations, Liquidity, Nigeria, Stock Market.

JEL classification: G12, O55, E44

1. INTRODUCTION

Stock market is a complex and dynamic system, which is influenced by several factors that impact its performance. Among these factors, market liquidity has emerged as a critical determinant of stock market efficiency (Amihud, 2002; Brunnermeier & Pedersen, 2009). Market liquidity refers to the ability to promptly

buy or sell securities at a fair price, without significantly affecting the market price (Goyenko, Holden & Trzcinka, 2009; Harris, 2003). A liquid market is essential for facilitating the smooth functioning of financial markets, as it enables investors to easily enter and exit positions, thereby reducing trading costs and enhancing price discovery (Hasbrouck, 2007). Liquidity plays a crucial role in stock market development as it facilitates efficient capital allocation for long-term investments, thereby fostering long-term economic growth. The possibility of this lies in the ability of investors to quickly and cheaply alter their portfolio, thereby reducing the riskiness of their investments, which helps to facilitate profitable investments in projects that are feasible. However, a liquid market enables savers to easily sell shares, allowing companies to raise capital on favorable terms (Ogunrinola & Motilewa, 2015; Abdul-Khaliq, 2013). Despite its importance, the relationship between market liquidity and stock market performance remains poorly understood as some studies suggest that market liquidity has a positive impact on stock market performance (Hasbrouck & Seppi, 2001; Chordia, Roll & Subrahmanyam, 2008; Korajczyk & Sadka, 2008), others argue that it has a negligible or even negative effect (Bekaert, Harvey & Lundblad, 2003; Lee, 2011). This ambiguity has significant implications for investors, policymakers, and market regulators seeking to promote efficient and stable financial markets.

Several studies by Researchers such as Adenuga (2010); Ogbulu and Uruakpa (2011); Idowu and Babatunde (2012); Nathanael (2014); Ogunrinola and Motilewa (2015); Panshak and Shingil (2016); Onoh (2016); Okoro (2017); Kolapo, Oke and Olaniyan (2018) and Ahmad and Yunusa (2019) as considered by this study in the Nigeria's context on market liquidity and stock market performance. It was observed that these existing studies created a temporal gap, which does not consider literature beyond 2019 in area of recent empirical trends. Consequently, a gap was instigated by this study, which seeks to contribute to extant literature to update research to reflect recent empirical trends. Basically, this research hypothesized no significant correlation between market liquidity and the Nigeria's stock market performance.

2. REVIEW OF RELATED LITERATURE

CONCEPT OF MARKET LIQUIDITY

Stock market liquidity is crucial for market development, as higher liquidity optimizes capital allocation, fosters long-term investment, drives technological innovation, and ultimately fuels long-term economic growth. Increase in liquidity can reduce the cost of equity capital through reduction in expected returns which investors require when investing in equity to compensate them for the risks, referred to as risk premium (Panshak & Shingil, 2016). Benić and Franić (2008) define liquid market as a situation where market participants can promptly execute large volume of transaction without significant price impact. Liquidity, which is a crucial aspect of stock market development, plays a significant role in investment decisions. It provides market participants with a sense of security and mitigates potential losses,

particularly in large transactions. However, less liquid markets can offer higher returns due to increased price volatility, albeit at a higher risk level.

Singh, Gupta and Sharma (2015) opined that liquidity describes the degree to which an asset or security can be quickly bought or sold on the market without affecting asset prices. Stock market liquidity is a vital indicator for measuring stock market growth and efficiency, as it facilitates the swift sale of assets without substantial price drops, ultimately supporting market performance. However, a well-functioning stock market can boost corporate performance and align managerial incentives with performance mechanisms. Firms with liquid stocks have better performance as measured by the market-to-book ratio (Singh, Gupta & Sharma, 2015). Similarly, Stange and Kaserer (2009) opined that market liquidity facilitates the trading of an asset. Stock market liquidity has driven long-term growth in developing countries by facilitating investment. Without liquidity, savers might avoid long-term commitments, hindering profitable projects. Conversely, a liquid market enables easy share sales, allowing firms to access equity capital at attractive terms. The stock market directs savings from surplus units to investments in deficit units, driving economic growth by enhancing liquidity and making capital more accessible. Many profitable investments require a long-term commitment of capital, but investors are often reluctant to relinquish control of their savings for long periods (Adenuga, 2010).

CONCEPT OF STOCK MARKET

Emeh and Chigbu (2014) describe the stock market as a complex institution with built-in mechanisms for mobilizing and channeling long-term funds from key economic sectors such as households, firms, and government to support economic growth. According to Adenuga (2010), the stock market is a place for medium to long term securities, and it comprises the primary market for the issue of new securities and the secondary market where existing shares are traded. Stock markets have a positive impact on firms' investment decisions and overall investment returns. Basically, the stock market mobilizes domestic savings by offering a range of financial instruments, enabling savers to diversify. It also acts as an intermediary, channeling savings from surplus units to deficit units for medium- and long-term investments. It is reputed to perform critical functions, which promote economic growth through the creation of liquidity.

Similarly, Singh, Gupta and Sharma (2015) opined that the stock market is a market for trading shares and listed securities. However, stock markets mobilize capital, provide investors with a secondary market, and enable financial institutions to trade securities, ultimately boosting firm performance and aligning managerial incentives. Panshak and Shingil (2016) referred to the capital market (stock market) as one of the most significant aspects of every financial market, which deals in long-term debt or equity-backed securities. Capital market is identified as an institution that contributes to the socio-economic growth and development in both emerging and developed economies through its vital role in intermediation process. This

capital market channels the wealth of savers to those who can put it to long-term productive use.

THEORETICAL REVIEW

This study is grounded in the Liquidity Preference Theory, developed by John Maynard Keynes in 1936, which emerged as a response to the Great Depression's persistent unemployment, addressing economic issues beyond the scope of the Quantity Theory of Money. The liquidity preference theory emphasizes the benefits of relinquishing liquidity for a specified period. It suggests that individuals prefer holding liquid assets, like cash, over less liquid ones, such as bonds, stocks, or real estate. This inclination primarily stems from the need for flexibility, security, and managing future uncertainty, as holding liquid assets enables investors to better withstand unexpected financial and economic shifts, particularly during crises. People prefer holding liquid assets during uncertain economic times, such as recessions, which require higher interest rates needed to encourage investment in less liquid assets. According to the theory, interest rates are shaped by the supply and demand for money. When people prefer holding cash, reducing the available money supply, bond prices drop. High liquidity preference drives interest rates up, incentivizing people to give up cash. Conversely, low liquidity preference leads to higher bond demand, potentially lowering interest rates. Keynes championed the idea that government intervention is crucial to stabilizing economies during financial downturns (Keynes, 1936).

REVIEW OF RELATED EMPIRICAL STUDIES

El-Wassal (2005) examined the link between stock market growth and economic growth, financial liberalization, and foreign portfolio investment in 40 emerging markets from 1980 to 2000. The study found that economic growth, financial liberalization policies, and foreign portfolio investments drove emerging stock market growth. Adenuga (2010) considered to determine the hypothesis if stock market development promotes economic growth in Nigeria using quarterly data from 1990:1 to 2009:4, employing the vector error correction model (VECM) technique. Consequently, the model validates the hypothesis that the stock market contributed to Nigeria's economic growth over the studied timeframe. Ogbulu and Uruakpa (2011) investigated the link between monetary policy and stock prices in the Nigerian capital market. The results obtained by employing the Johansen co-integration, error correction model and Granger causality techniques showed a long-run equilibrium relationship between stock prices and variables on monetary policy, while a unidirectional causality from stock prices to money supply, and from foreign exchange rate to stock prices was recorded. Fernandez-Amador, Garchter, Larch and Peter (2011) applied vector autoregressive tool on panel data in the Eurozone and determined that changes in monetary policy (money growth) boost stock market liquidity in the Eurozone, specifically in Germany, France and Italy stock exchanges.

Zakaria and Shamsuddin (2012) applied GARCH procedures to investigate the macroeconomic volatility and stock market in Malaysia utilizing causality test and regression, and the result exposed that volatility of macroeconomic variables Granger stock return volatility. Idowu and Babatunde (2012) investigated the effect of financial reform on capital market development in Nigeria. The study examined 1986-2010 data using the ordinary least squares method and found that the variables had a negative impact on market capitalization. Bashorun and Bakare-Aremu (2013) considered the correlation between capital market development and economic growth in Nigeria, using a data period from 1981 - 2011. The analysis, employing a vector autoregressive model and Granger causality tests, revealed a significant positive relationship between capital market variables (all-share index, market capitalization, and number of deals) and economic growth. Nathanael (2014) investigated the influence of stock price and capital market development on economic development in Nigeria. The Johansen co-integration and ECM techniques were used to estimate the pre-SAP and SAP era for capital market indicators such as market capitalization, government stock rate, value of equities and new issues from 1980 to 2012. The results were statistically significant with a positive linear correlation to economic growth in Nigeria. Singh, Gupta and Sharma (2015) examined the relationship between stock market liquidity and firm performance from the period of the years 2005 - 2014. The ordinary least square technique and the general linear models were adopted. Correlation between stock market liquidity and firm performance was observed, such that stock market liquidity was correlated with higher firm performance as measured by Tobin's Q. Abdul-Khaliq (2013) explored the link between stock market liquidity and economic growth in Jordan. Using the ADF unit root test and ordinary least squares, the study found that market turnover ratio had a stronger impact on economic growth than market capitalization. However, Ogunrinola and Motilewa (2015) examined the impact of stock market liquidity on economic growth of Nigeria from 1980 to 2012. The results of the ordinary least square technique and the Johansen co-integration approach revealed that stock market liquidity had an insignificant effect on the Nigeria's economic growth.

Panshak and Shingil (2016) examined the relationship between capital market liquidity and economic growth in Nigeria, using time series data from 1981 to 2014. Using an autoregressive distributed lag model, the study finds evidence of a long-term relationship between capital market liquidity and economic growth. Adekunle, Nageri, Muritala and Oyeleye (2016) studied the impact of financial sector development on Nigeria's economic growth using time series data from 1985 to 2014, applying the ordinary least squares, units root test, Johansen co-integration test and error correction model. The results showed that the link between the financial and real sector was weak and could not propel the economic growth needed. Onoh (2016) studied the effect of stock market liquidity on daily returns in the Nigeria's capital market using daily data from 2nd January 2001 to 31st December 2015. Applying the unit root test, ordinary least square technique and Granger

causality test, the analysis showed that market capitalization had a positive and significant effect on stock returns, while the value of transaction ratio negatively and significantly affected stock returns. Okoro (2017) investigated the impact of macroeconomic factors on Nigeria's stock market performance from 1986 to 2015, finding no significant effect using regression analysis. Acha, Akpan and Ekpo (2017) examined the effects of capital market development on the Nigerian economic growth from 1981 - 2016. The study employed the multiple regression model, Johansen co-integration test, normalized long run co-integrating equations, parsimonious vector error correction model and pair-wise causality tests. The co-integration tests revealed a long-term dynamic relationship between the indicators of capital market and economic growth. While the parsimonious model showed that the indicators of capital market have strong and positive significant relationship and a long run effect on Nigerian economic growth. Kolapo, Oke and Olaniyan (2018) considered the impact of macroeconomic fundamentals on stock market performance in Nigeria from the period 1986 to 2015. The analysis, employing the autoregressive distributed lag bounds testing approach, revealed that GDP and money supply were significant drivers of Nigeria's stock market performance, while interest rates showed no significant influence. Ahmad and Yunusa (2019) examined the impact of the Nigeria's stock market performance on the economic growth of Nigeria using a time series data from 1981 - 2016. The study, employing OLS and Johansen co-integration analysis, found that the capital market contributed to Nigeria's economic growth through increased bank lending, market capitalization, and turnover ratio.

3. METHODOLOGY

This study uses the *ex-post facto* research design, which attempts to examine the cause-and-effect relationship between the dependent and independent variables, employing multiple time series econometric tools and E-Views software for investigative and inferential analysis. Data for this research were culled from the statistical bulletin of the Nigeria Central Bank, covering 25 years period from 1999 to 2023. This research established 1999 as its start year, based on the observation that All-Share Index and crude oil prices were very low in 1999 compared to subsequent years as it was the year of Nigeria's transition to democracy. However, it is imperative to note that the chosen period was primarily driven by data availability (CBN statistical bulletin).

SPECIFICATION OF THE EMPIRICAL MODEL

Model specification illustrates the arithmetic and economic correlation that exists between the endogenous (ALSHADEX) and the exogenous (CRUDOILP, FINLIQ, INFRATE) variables. The linear regression model to test the Null hypothesis was adopted from the work of Alenoghena (2014), specified as $GDP_t = F(MCAP_t, TVS_t, TLE_t, FID_t, MTR_t, NMD_t, INT_t)$.

Consequently, the mathematical function for this study is specified as:

$$ALSHADEX_t = F(CRUDOILP_{t,}\ FINLIQ_{t,} INFRATE_t) \quad (1)$$

However, the econometric function above becomes:

$$ALSHADEX_t = \partial_0 + \partial_1\ CRUDOILP_t + \partial_2\ FINLIQ_t + \partial_3\ INFRATE_t\ +\ \mu_t \quad (2)$$

Thereafter, the model was transformed into its log-linear model to achieve several objectives, such as to stabilize data variance, to decrease coefficient values, and to possibly eliminate spurious relationships and autocorrelation (Gujarati, 2003).

$$LALSHADEX_t = \partial + \partial_1\ LCRUDOILP_t + \partial_2\ FINLIQ_t + \partial_3\ LINFRATE_t\ +\ \mu_t \quad (3)$$

Being that the variables used in the model achieved stationarity, then, to capture both short-term dynamics and long-term equilibrium relationships, the error correction model (ECM) is utilized. The ECM accounts for the adjustment process that occurs when the variables deviate from their long-term equilibrium level. In ECM, the short-term dynamics are modelled alongside the equilibrium state in the long term.

Generally, error correction model is therefore given as:

$$\Delta LALSHADEX_t = \sigma_0 + \sum_{q=1}^{p} \beta_1 \Delta LCRUDOILP_{t-1} + \sum_{q=1}^{j1} \beta_2 \Delta LFINLIQ_{t-j} + \sum_{q=1}^{j2} \beta_3 \Delta LINFRATE_{t-j} + \delta ECM_{t-1} + \mu_t \quad (4)$$

Where:

Δ is the first difference operator; ∂_0 represents the constant coefficient; ∂_1, ∂_2 and ∂_3 represent coefficients of the exogenous variables; $LALSHADEX_t$ represents the log of All-Share Index as a stand-in variable for Nigeria's stock market performance; $LCRUDOILP_t$ represents the log of crude oil prices; $LFINLIQ_t$ represents the log of financial liquidity ratio; $LINFRATE_t$ represents the log of inflation rate as a control variable; μ_t represents the error term, which has a mean of zero and captures the residual adjustments in $LALSHADEX_t$; the *a-priori* expectations are $\partial_1 > 0$, and ∂_2, $\partial_3 < 0$.

ESTIMATION PROCEDURE

The empirical tests as executed by this study include the descriptive statistic, which depicts the fundamental features of the data set, as a test for data normality; The augmented Dickey-Fuller unit root test, helps to ascertain the stationarity of the data set; The Johansen co-integration technique, helps to prove the long run equilibrium correlation; Whereas the error correction model helps to capture the short run dynamic; The ordinary least square helps for parameter estimation in terms of relationship between the variables; The Granger causality test helps to determine if a specific variable plays any role in the changes that occur in another variable. The test hypothesis was based on 5% significant level, employing the p-value statistic, which denotes the rejection of the null hypothesis if the p-value is less than 0.05, and otherwise retained if the p-value exceeds 0.05.

4. RESULTS AND DISCUSSIONS

Table 1 *Shows the Descriptive Statistics for the Variables used in the Analysis*

	ALSHADEX	CRUDOILP	FINLIQ	INFRATE
Mean	29163.11	64.93760	51.69600	12.86560
Median	27485.27	65.85000	50.90000	12.56000
Maximum	62088.52	113.7600	81.42000	24.66000
Minimum	5264.190	17.44000	26.39000	5.390000
Std. Dev.	14115.98	30.63486	13.24672	4.554642
Skewness	0.349158	0.141973	0.210584	0.497273
Kurtosis	2.795804	1.858548	2.979511	3.081386
Jarque-Bera	0.551397	1.441185	0.185211	1.037234
Probability	0.759042	0.486464	0.911553	0.595343
Sum	729077.7	1623.440	1292.400	321.6400
Sum Sq. Dev.	4.78E+09	22523.87	4211.412	497.8744
Observations	25	25	25	25

Source: Authors' computation (2025), using Eviews software

In Table 1, the probability values of 0.759042, 0.486464, 0.911553 and 0.59534 are greater than 0.05, which indicate statistical insignificant values at 5% level, with corresponding Jarque-Bera statistics of 0.551397, 1.441185, 0.185211 and 1.037234 respectively for ALSHADEX, CRUDOILP, FINLIQ and INFRATE respectively. The probability values of the Jarque-Bera statistics reveal the presence of normality in the data distribution.

PRELIMINARY RESULTS

Table 2 *Presents the Results of the Augmented Dickey-Fuller Test for Assessing Stationarity*.

Variables	At level	Prob.	At first difference	Prob.	Order of integration	Remark
LALSHADEX	-2.438601	0.1424	-4.224408	0.0036	I (1)	stationary
LCRUDOILP	-2.311354	0.1766	-4.544235	0.0017	I (1)	stationary
LFINLIQ	-2.267559	0.1897	-4.926805	0.0007	I (1)	stationary
LINFRATE	-2.857164	0.0654	-4.150131	0.0055	I (1)	stationary

Source: Authors' Computation (2025), using Eviews software

In Table 2, the first difference for LALSHADEX, LCRUDOILP, LFINLIQ and LINFRATE exhibit stationarity, with p-values below the 0.05 significance threshold, suggesting an order of integration, I (1) after differencing. Furthermore, the variables at a significant 5% level are devoid of unit root problems. Therefore,

this allows for the Johansen co-integration test to assess long-run relationships among the study's variables.

Table 3: *Johansen Co-integration Test Results*

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.371697	10.68885	3.841466	0.0011

The tests indicate 1 co-integrating equation(s) at 0.05 level, which signifies the hypothesis rejection

Source: Authors' computation (2025), by means of Eviews7 software

The Trace and Max-eigenvalue tests specify 1 co-integrating equation due to the observed probability values of less than 5% significance threshold in Table 3. The outcome ascertained a significant long-term correlation between LCRUDOILP, LFINLIQ, LINFRATE and LALSHADEX, suggesting long-run equilibrium relationship between the endogenous and exogenous variables.

MAIN RESULTS

Table 4*: Outcomes of the Error Correction Model (ECM)*

Endogenous Variable: DLALSHADEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.054277	0.048521	1.118628	0.2772
DLCRUDOILP	0.588947	0.161745	3.641216	0.0017
DLFINLIQ	-0.396165	0.213079	-1.859238	0.0786
DLINFRATE	0.051552	0.135464	0.380557	0.7078
ECM (-1)	-0.379889	0.151978	-2.499627	0.0218
R-squared	0.489333	Mean dependent var		0.10282
Adjusted R-squared	0.381824	S.D. dependent var		0.28791
S.E. of regression	0.22637	Akaike info criterion		0.04976
Sum squared resid	0.973623	Schwarz criterion		0.29519
Log likelihood	4.402897	Hannan-Quinn criter.		0.11487
F-statistic	4.551561	Durbin-Watson stat		1.76385
Prob(F-statistic)	0.009534			

Source: Authors' Computation (2025), using Eviews software

In Table 4, the ECM outcomes satisfy the necessary conditions for a short-run relationship, with a coefficient of -0.379889 (less than -1) and a probability value of 0.0218 (below the 5% significance level), indicating statistical significance.

Specifically, the coefficient suggests that approximately 3% of deviations from long-run equilibrium are corrected in the short-term following a temporary disruption. This finding implies a significant short-run equilibrium correlation between LCRUDOILP, LFINLIQ, LINFRATE and LALSHADEX.

Table 5: *Ordinary Least Square Result with Autocorrelation*

Endogenous Variable: LALSHADEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.892241	1.435555	3.407908	0.0026
LCRUDEOILP	0.912396	0.136579	6.680331	0.0000
LFINLIQ	0.165349	0.277448	0.595964	0.5576
LINFRATE	0.363636	0.193324	1.880966	0.0739
R-squared	0.709354	Mean dependent var		10.13477
Adjusted R-squared	0.667834	S.D. dependent var		0.608909
S.E. of regression	0.350938	Akaike info criterion		0.889232
Sum squared resid	2.586308	Schwarz criterion		1.084253
Log likelihood	-7.115406	Hannan-Quinn criter.		0.943323
F-statistic	17.08432	Durbin-Watson stat		0.897816
Prob(F-statistic)	0.000008			

Source: Authors' Computation (2025), using Eviews software

In Table 5, the ordinary least square outcomes indicate the presence of autocorrelation, such that 0.897816 which represents the Durbin Watson statistic cannot be approximated to 2. This specifies a spurious result, and it is not proper for conclusive analysis. Consequently, the Cochrane-Orcutt Iterative procedure - AR (1) was adopted to eliminate the existence of autocorrelation.

POST-ESTIMATION TESTS

Table 6: *OLS Cochrane-Orcutt Iteration Results with no Autocorrelation*
Endogenous Variable: LALSHADEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.667608	1.343073	7.198127	0.0000
LCRUDOILP	0.460842	0.19274	2.391002	0.0273
LFINLIQ	-0.259392	0.247795	-1.046800	0.3083
LINFRATE	-0.032815	0.152503	-0.215176	0.8319
AR (1)	0.780824	0.124191	6.287292	0.0000
R-squared	0.82386	Mean dependent var		10.20003
Adjusted R-squared	0.786778	S.D. dependent var		0.525177

S.E. of regression	0.242506	Akaike info criterion	0.187471
Sum squared resid	1.117374	Schwarz criterion	0.432899
Log likelihood	2.750342	Hannan-Quinn criter.	0.252584
F-statistic	22.21714	Durbin-Watson stat	1.732453
Prob(F-statistic)	0.000001		
Inverted AR Roots	.78		

Source: Authors' computation (2025), using Eviews software

In Table 6, the Cochrane-Orcutt iterative estimation results are reliable for analysis, as indicated by a Durbin Watson statistic of 1.732453 that can be rounded up to 2, suggesting no autocorrelation. The endogenous variable exhibits substantial logical variation, with R-squared and adjusted R-squared values of 82% and 78%, respectively, demonstrating strong explanatory power between the variables. The LCRUDOILP coefficient has a positive correlation of 0.460842, with a t-statistic of 2.391002 and a probability value of 0.0273 < 0.05, aligning with our *a-priori* expectations. However, the coefficient of LFINLIQ has a negative correlation of -0.259392, with a t-statistic of -1.0468 and a probability value of 0.3083 > 0.05, aligning with our *a-priori* expectations. Conversely, the coefficient of the control variable, LINFRATE, displays a negative correlation of -0.032815, with a t-statistic of -0.215176, and a probability value of 0.8319 > 0.05, supporting our *a-priori* expectations.

Table 7: *Granger Causality Test Result*

Null Hypothesis:	Obs	F-Statistic	Prob.
LCRUDOILP does not Granger Cause LALSHADEX	24	0.01017	0.9206
LALSHADEX does not Granger Cause LCRUDOILP		0.51626	0.4804
LFINLIQ does not Granger Cause LALSHADEX	24	4.30743	0.0504
LALSHADEX does not Granger Cause LFINLIQ		0.76053	0.3930
LINFRATE does not Granger Cause LALSHADEX	24	0.36999	0.5495
LALSHADEX does not Granger Cause LINFRATE		0.03972	0.8439

Source: Authors' computation (2025), using Eviews software

In Table 7, LCRUDOILP does not granger causes LALSHADEX, as well as LALSHADEX does not granger causes LCRUDOILP. This indicates that the variations in All-Share Index as a measure for Nigeria's stock market performance were not significantly caused by crude oil prices due to the p-values which is above 0.05. Besides, LFINLIQ granger causes LALSHADEX, which indicate that, the variations in All-Share Index as a measure for the performance of Nigeria's stock

market was significantly affected by financial deepening due to the p-value of 0.0504 thresholds. While LALSHADEX does not granger cause LFINLIQ due to the p-value which is above 0.05. However, the result of the control variable, LINFRATE does not granger causes LALSHADEX, as well as LALSHADEX does not granger causes LINFRATE due to the p-values above 0.05.

TEST OF HYPOTHESES

This research hypothesized no significant correlation between crude oil price, financial liquidity ratio, inflation rate and the Nigeria's stock market performance. The summary test of hypotheses in Table 8 shows the coefficients, t-statistics and p-values at 5% significant level. The probability values for the variables at 5% significant level, would determine the hypotheses to retain the null hypothesis or reject the alternative hypothesis.

Table 8: *Summary of Hypotheses Test Results*

Variables	Coefficients	t- statistic	Prob.	Remarks
LCRUDOILP	0.460842	2.391002	0.0273	Reject H_0
LFINLIQ	-0.259392	-1.046800	0.3083	Retain H_0
LINFRATE	-0.032815	-0.215176	0.8319	Retain H_0

Source: Extracted from Table 6

Basically, Crude oil prices significantly impact Nigeria's stock market performance, while financial liquidity ratio and inflation rate have no significant effect.

DISCUSSION OF FINDINGS

The empirical findings as revealed by this study show that the Johansen co-integrating test and the error correction model suggest a long run equilibrium and a significant short-run equilibrium correlation between crude oil prices, financial liquidity ratio, inflation rate and All-share index respectively. However, the Cochrane-Orcutt iterative OLS analysis found a significant positive link between crude oil prices and the All-share index, and a negative but insignificant relationship between financial liquidity and the All-share index. The result of the control variable for inflation rate reveals negative and insignificant connection with All-share index. Furthermore, the Granger causality outcome demonstrates evidence of significant pressure of financial liquidity ratio on All-share index, while evidence of insignificant pressure of crude oil prices and inflation rate were observed on All-share index. However, the result of crude oil prices agrees with the liquidity preference theory, which focused on the rewards for not hoarding liquidity for a specified period. Hence, the positive fluctuations in liquidity preference influence the supply of money, which affect interest rates thereby positively affecting the Nigeria's stock market performance. Based on the result, the positive and significant outcome of crude oil prices on the Nigeria stock market performance indicates that higher oil prices during the study period had a substantial influence on the Nigeria

stock market performance. This outcome conforms to the researchers' *a-priori* anticipation, which is in line with the studies of Singh, Gupta and Sharma (2015); Onoh (2016), such that stock market liquidity had positive and significant relationship with firm's performance. However, the study of Alenoghena (2014) contradicts the result with a positive and insignificant relationship. Besides, the result of financial liquidity ratio agrees with the liquidity preference theory, which focuses on the results of holding liquidity for a specified period. Hence, the adverse fluctuations in liquidity preference influence the supply of money, which can affect interest rates thereby affecting the Nigeria stock market performance. As such, the negative and insignificant outcome of financial liquidity on the Nigeria stock market performance implies that the adverse effect of financial liquidity during the period under study had no meaningful hindrance on the performance of the Nigeria stock market. This outcome conforms to the researchers' *a-priori* anticipation, which is in line with the studies of Ogunrinola and Motilewa (2015) for which a negative and insignificant outcome was observed in stock market liquidity. However, the study of Alenoghena (2014) in contradiction, exhibited positive and insignificant relationship in stock market liquidity.

Furthermore, the outcome of the control variable of inflation rate though not considered significant in explaining the Nigeria stock market performance under this scenario reveals negative and insignificant connection to the Nigeria stock market performance. These findings conform to the researchers' *a-priori* anticipation, which agrees with the studies of Ogunrinola and Motilewa (2015) for which a negative and insignificant outcome was observed in stock market liquidity. However, the study of Alenoghena (2014) in contradiction, exhibited positive and insignificant relationship in stock market liquidity.

5. CONCLUSION AND RECOMMENDATIONS

Consequent upon ascertaining that crude oil prices showed positive and significant correlation with the Nigeria's stock market. This revealed that crude oil prices had substantially affected the Nigeria's stock market performance for the past two decades. However, financial liquidity ratio shows negative and insignificant correlation with the Nigeria stock market, which infer that financial liquidity ratio for the past two decades had adversely with no substantial effect on the Nigeria's stock market performance. On this basis, it is the conclusion of this research that the fluctuating increase in crude oil prices has invigorated the performance of the Nigeria's stock market over the past two decades. While financial liquidity hasn't had a significant impact on Nigeria's stock market declines over the last two decades.

Based on empirical findings, the study strongly advocates that government should continue to create a favorable macroeconomic environment to facilitate a steady increase in crude oil prices, to sustain and improve stock market performance.

Furthermore, government should ensure that more liquidity is injected into the stock market to efficiently enhance performance.

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