Eurasian Journal of Economics and Finance, 10(4), 2022, 152-163
DOI: 10.15604/ejef.2022.10.04.003

EURASIAN JOURNAL OF ECONOMICS AND FINANCE

www.eurasianpublications.com

LIQUID STOCK AND FINANCIAL PERFORMANCE OF NON-FINANCIAL QUOTED COMPANIES IN NIGERIA

Rafiu Oyesola Salawu
Obafemi Awolowo University, Nigeria
Email: rsalawu@oauife.edu.ng

Segun Wale Olayinka
Corresponding Author: Obafemi Awolowo University, Nigeria
Email: walesamuel52@yahoo.com

Momodou Mustapha Fanneh
University of the Gambia, The Gambia
Email: mmfanneh@utg.edu.gm

Mary Kehinde Salawu
Obafemi Awolowo University, Nigeria
Email: mksalawu@oauife.edu.ng

Received: June 7, 2022 Accepted: October 11, 2022

Abstract

There have been several recent concerns about the deteriorating state of Nigerian companies' performance. Many investors in Nigeria over the years have accused the quoted companies of not doing enough to improve their performances. Researchers are concerned about the factor that affects performance as a result of this. Therefore, this paper examines the influence of stock liquidity on the financial performance of companies in Nigeria. Data used are sourced from the financial statements of selected companies and the fact book of the Nigeria Stock Exchange for the period between 2012 and 2019. Data are analyzed using both descriptive and inferential statistics. The empirical findings of this study confirm that liquid stock, proxied by the turnover ratio (TOR), greatly impacts the performance of companies in Nigeria. Sequel to this, this paper concludes that the degree of operational success of Nigeria's corporate entities is commensurate with the liquidity status of their stocks.

Keywords: Financial Performance, Liquid Stocks, Quoted Companies, Nigeria

JEL Classifications: G30, M21, P34

1. Introduction

Over the years, the dwindling performance of companies in Nigeria has become a great concern in the field of finance literature and to both existing and prospective investors who have committed or desired to commit their financial resources to the business operations of the entities. Every investor intends to get an appropriate reward for the risk undertaken by investing hard-earned money in the firm's business activities. However, the performance of these firms that ought to give certainty to the investors of getting an adequate return on their investments is going down the drain every second. Especially in Nigeria, many investors have accused the entities of not doing enough to improve their performances which have become epileptic over the years.

In the study of Ku *et al.* (2010), it was revealed that only 10% of the quoted manufacturing companies in Nigeria could boast of operating at a sustainable level, while over 60% are performing poorly to the extent that their going concern is threatened. Also, the analysis of Nigerian companies' performance by Ojowu (2003) revealed that companies in Nigeria are progressing very slowly due to various impediments battling with industry success in Nigeria. The above claims supported the result of Alos (2000) on the analysis of firms' performance in Nigeria. According to the study, the performance of Nigerian firms over the years has been inconsistent, uncertain, and chaotic. More so, the Nigerian Stock Exchange (NSE) report described the firms' performance in Nigeria as sloppy and worrisome. The reports stated at the end of 2018 that all NSE sector indices tended towards the negative side and were flashing red (Nigeria Stock Exchange, 2018). Hence, this unwelcome trend in performance called for critical analysis.

As a result of this, many researchers such as Singh *et al*. (2015), Sidhu (2016), Singh (2017), and Pham *et al*. (2020) have shown interest in the concept of performance, and efforts have been made to determine the factors that influence corporate performance to nip in a bud several issues pertaining to its undesired trend. Their findings revealed that the performance of companies has been deteriorating over the years due to many factors. However, few studies in developed and developing countries, such as Banerjee *et al*. (2007), Fang *et al*. (2009), Jiang *et al*. (2017), and Sawitri and Sulistyowati (2018) have shown that one major factor that influences performance is "stock liquidity".

A stock is considered liquid when a buyer or seller can buy or sell it in a commercial volume with little or no effect on the price. It is the desire of an investor who is a liquidity supplier to react reversely to the offer made by its counterpart, a liquidity demander. That is, shareholders always desire to trade on stocks that can be bought or sold effortlessly, speedily, and at little cost. The liquidity nature of stocks always leads to a greater number of participants in the stock market and encourages dispersion of ownership which will enable managers to be independent in deciding the right course of action to move the organization forward without the threat of outsiders.

More so, stock liquidity reduces the lopsidedness of information between insiders and outsiders due to the availability of more information to minority shareholders. The participants in the stock market always encounter serious rivalry due to the expansion of the market. Striving for survival through obtaining more private information that will be of great benefit for trading becomes imperative. Therefore, this reduction in the communication gap between shareholders holding major shares and those with fewer shares gives the latter a better understanding of the entities' financial status and grants them the opportunity to partake in the firm's decision-making process (Jiang *et al*. 2017). Several studies in developed countries have revealed that this informational effect, which is the product of stock liquidity, influences financial performance (Banerjee *et al*. 2007; Griffin, 2010; Kim, 2016; Lee and Yoon, 2017). Studies imply that stock trading activities impact the operational breakthrough of quoted companies in developed economies.

The above relationship between stock trading activities and performance could be linked to Nigeria's context and substantiated by the fluctuations in the stock trading volume in Nigeria over the years. The volume data of companies in Nigeria reported in May 2019 was 6,070-unit billions, which decreased from 8,570-unit billions in April 2019. It averaged 7,960-unit billions from January 2008 to May 2019 with 137 observations. This data skyrocketed to 93,200-unit billions in February 2013 and dropped drastically to 3,680-unit billions in October 2016 (Nigeria Shares

Trading, 2019). Based on these figures, the fluctuation of stock liquidity could greatly influence performance.

Hence, this study examines the influence of liquid stock on the performance of companies in Nigeria. By critically examining the liquidity status of companies' stocks in Nigeria, this research contributes to the extant literature by providing insight into the potency of ownership dispersion resulting from stock liquidity. The rest of this study has been divided into four sections. In section two, several theories and studies were reviewed. Section three discussed the methodology, while section four focused on results. The study is concluded in section five.

2. Literature review

2.1. Theoretical review

Several questions have been raised in finance literature on the factors that influence the performance of companies. In an attempt to provide answers to the questions, different theories have been developed. These theories include the market microstructure theory, stewardship theory, and the classical theory of the firm.

Market micro-structure theory focuses on the exchange issues that take place in the stock market. This theory addresses the exchange of real and financial assets, but more attention is shifted to the latter due to sufficient information. The idea behind the market microstructure theory is the degree of influence on how the market works and the determinants of stock prices, cost of transactions, and volume of trade and trading activities. However, there have been many innovations to this theory during the 21st century, which gave room for expanding its tentacles to various worrisome happenings, including market abuse and insider trading in the stock market. According to Russell and Engle (2010), market micro-structure is concerned with what stands to be the reaction of stock prices to the emergence of fresh discovery and trading methods.

The idea behind "stewardship theory" is that those who manage an organization's business operations should ensure that their interests are allied with those of the co-owners and the organization by every possible means. Credited to Donaldson and Davis (1994), this theory has a contrary view about the agents when considering agency theory principles. The agents are believed to be good ambassadors and better managers who need no monitoring. To them, those saddled with the responsibility to manage the organization should be trusted and not seen as opportunistic so as to minimize monitoring costs. It is of the belief that agents are not working for themselves but rather for the realization of the objectives of the companies. One of these objectives is profitability, which is believed will increase the shareholders' wealth through dividend payments and increases in share value. The implication is that suboptimality is far from the result of the stewards as they admire maximum satisfaction derived from realizing the companies' goals rather than their individual goals. Meanwhile, the hard nut question is to what extent the managers will be willing to ensure the attainment of good corporate performance. The classical theory of firm emphasizes that the essence of the existence of a firm is profit maximization. Hayek (1945) further substantiates this claim, declaring that having greater returns on capital should be the only major goal an organization should pursue with all its zeal and strength. Solomon (1963) further asserts that a firm, as an economic unit, has objectives that can be classified into short and long-term.

First of all, the company intends to ensure that enough wealth is created for the shareholders and that an effort is made to ascertain the company's going concern in the nearest future. To accomplish this, the business will ensure that only profitable financial transactions are made, profitable in the sense that the revenue generated from operations will cover and be greater than the cost of operations so that owners will be repaid for their investment in the business. However, in the long run, the idea is to encourage the owners' continuous participation in the entities' investments by ensuring that investors get adequate returns that could be obtained elsewhere. Additionally, this claim offers models for how rational decision-making corporate organizations work to maximize a positive number or reduce a negative one. According to the notion, a company maximizes profits in order to provide its owners attractive rewards for their contributions to the achievement of the company's goals. In the development of this theory, it is

essential to note that managers behave as if they are maximizing profits, irrespective of what they are attempting to achieve.

In theory, the agitation to increase earnings is presumed to be the target of all profit-oriented organizations. Meanwhile, the issue of separation of control and ownership has been a major concern because of the conflict of interest that typically arises between those in control of the organization and the owners (Pike and Neale, 2016). In practice, the interest of the shareholders is always at variance with that of the managers as the investors may prefer the distribution of earnings in the form of dividends while the management may want to retain it for investment or expansion purposes. Apart from the dispersion of ownership and control experienced by large enterprises, the progressive scale and the rising tide of social concerns about their operations call to question managers' profit motives and patterns of decision-making.

2.2. Empirical studies

There have been various ideas in financial literature among scholars regarding the association between liquid stocks and the performance of companies. In a study by Fang *et al*. (2009), the relationship between liquid stock and performance is examined using different statistical techniques to achieve the goal. The study, conducted on data collected from different sources such as the Centre for Research in Security Prices (CRSP), Investor Responsibility Research Centre (IRRC), and Compustat industry annual file, revealed that stock liquidity and firms' performance are positively related. This result implies that companies with liquid stock perform better than those with illiquid stock. Indeed, Dalvi and Baghi (2014) provide evidence through their study demonstrating a strong correlation between the extent of the liquidity prowess of stock and the performance of entities in Iran, using multiple regressions with 154 firms quoted on the stock market of Iran.

In another study on Iran's economy, Arian *et al*. (2014) examine the impact of liquid stock on the worth of firms. A total of 108 firms were selected based on the conditions stated for the research work in which SPSS was employed for the data analysis. The outcomes unveil a direct relationship between turnover volume and Tobin's Q. This implies that the liquidity prowess of stock is related to the worth of firms. Singh *et al.* (2015) conduct a study on India covering the period from 2005 to 2014. In the study, access return and Tobin's Q are proxies of liquid stock and performance, respectively. Hence, it is found through the statistical technique used for the data analysis that the performance of firms is positively influenced by stock liquidity. This finding implies that the company's performance will improve as its stock liquidity prowess improves.

In the study conducted in Kenya by Omesa (2015), the weak interrelationship between stock liquidity and financial performance is brought to the attention. The authors conclude that liquidity is not the only influential factor of financial performance, but other factors drive financial performance. The result is realized through data gathered from annual reports of selected financial institutions listed on the Nairobi Stock Exchange for five years. Furthermore, Nguyen *et al.* (2016) investigate if performance is influenced by liquid stock. The study proxies firms' value with Tobin's Q. The study's outcome indicates that improving an entity's stock liquidity always leads to an enhancement in the firm's value. Firms with more liquid stocks are characterized by better operating performance. Firm size (FS) also exhibits a positive relationship with firm performance. This finding implies that larger companies have several opportunities, such as easy access to funds, low cost of production, and the economics of large scale, to boost their performance compared with the small companies. This implication supports the findings of Arian *et al.* (2014) and Sidhu (2016). Investment opportunity exhibits a positive association with the dependent variable of performance. Thus, companies with more investment opportunities have every privilege to enhance their performance. In other words, more investment opportunities coupled with the ability to embrace them will enhance the firm performance.

In the work of Sidhu (2016), manufacturing companies in India captured by the S&P BSE 100 Index from 2009 to 2012 are considered to investigate the implication of stock liquidity on companies' value. The study discovers a direct relationship between the two variables examined. Amivest measure is used as a proxy for stock liquidity while performance is proxied by Tobin's Q.

Singh (2017), to unravel the connection of the two variables, makes use of different mechanisms to confirm whether stock liquidity enhances companies' performance, dampens it or has no implication on it. By using the data from the stock exchange market of India for the period of nine years (2005-2014), the study's findings show the degree of control the independent variable has on the dependent variable. This indicates that the level of liquidity status of a company's stock has a great role to play in its financial success.

In the Nigeria context, Florence *et al.* (2017) provide claims to substantiate the previous findings. Manufacturing companies are considered, and their financial statistics are used for the period of 29 years (1985-2014). The outcomes depict a weak but positive association among the studied variables. More so, Jawed (2017), to determine the dynamic interaction among some concerned variables, examines the existing rules governing the pattern of shareholding ability in India. The study, which uses the ordinary least square method, discovers that a variation in the liquidity status of stocks of companies in India is directly related to the variation in the performance of such companies. Therefore, the study concludes that the minimum public shareholding regulation provides evidence showing a direct causal relationship between liquid stock and the performance of Indian companies.

Also, Zhang *et al.* (2018) express the opinion on the implication of stock liquidity on the end result of companies in China. The study is to contribute to literature as there are mixed results among the studies on the subject. Their study outcomes reveal that a company's performance could be enhanced through a higher liquidity level of the stock. In the same vein, Olayinka (2019) examines if there is any nexus between them. Fifty companies transacting stocks on the Nigerian Stock Market are selected, and the data is analyzed using inferential statistics. The turnover ratio and return on the asset are proxies for stock liquidity and performance, respectively. Based on the study's outcomes, the association between stock liquidity and performance is positive but insignificant.

More so, Eze *et al.* (2019) examine the connection between stock market liquidity and the performance of quoted manufacturing companies. The ex-post factor research design and regression analysis are adopted to analyze the time series data gathered for the period of thirty-two years from the statistical bulletin of CBN and the fact book and the handbook of the World Bank. The authors find a positive relationship between stock market liquidity and the performance of manufacturing companies. By implication, the increase in market stock liquidity, according to the study, improves the companies' performance. The study indicates that the government's policies geared towards stock liquidity improvement added more value to the performance of these companies in the concerned sector. Hence, the former is seen as a driving force for the latter.

In another study, Batten and Vo (2019) explore the association between the stock's liquidity and the companies' value in terms of performance in an emerging economy. The study covers a period of nine years (2000-2014). The result shows a negative relationship between the liquidity of stocks of companies and their respective performances. A more recent study by Pham *et al.* (2020) reports that liquid stock positively affects companies' value, and such a relationship can be strengthened through the strong protection of investors. The study gathers data from sampled listed companies from selected countries between 2009 and 2018. The random effect model is employed, and it is recommended that policymakers should develop policies that would guarantee investors' protection. Also, the study of Aybar *et al.* (2020) reveals the importance of having a good understanding of the connectedness and correlation among different financial markets and commodities to boost performance. The results show that this connectedness is only sacrosanct in the long term and that the connectedness dynamics change when the effect of cross-correlation is considered.

In the most recent work, Alusa and Kalui (2021), who investigate the extent of influence stock liquidity could have on companies' progress, discover that a major driving force of performance is the liquidity level of stocks. Sequel to those mentioned above, it is clear that extant literature regarding liquid stock and performance is prominent in the advanced economies and a few emerging countries but remains scarce in Nigeria.

3. Data and methodology

All the non-financial quoted companies in Nigeria, totaling 109, were considered initially. Out of this, data were gathered from the fact book of the Nigeria Stock Exchange and audited financial statements of 50 companies, which were chosen based on a purposive sampling technique covering the period between 2012 and 2019. The selection was also based on the availability of required financial information in their annual reports for the sample period and consistent trading on the Nigerian stock exchange market floor. A Hausman test was carried out to select between fixed and random effects, which were also employed in the analysis of the data obtained.

3.1. Model specification

In this study, performance (dependent variable) was measured by return on the asset, while stock liquidity (main variable of interest) was captured by turnover ratio. As shown in Table 1, we used several control variables such as investment opportunity, firm size, cash holding, firm age, and financial leverage, which have been proven to affect financial performance (Bostanci *et al.* 2018; Jabbouri, 2016; Olayinka *et al.* 2021; Yusuf, 2019). The linear relationship between stock liquidity and financial performance is specified in Equation 1.

$$InROA_{it}=\beta_0+\beta_1 InTOR_{it}+\ \beta_2 InFAGE_{it}+\beta_3 InFINLEV_{it}+\beta_4 InFS_{it}+\beta_5 InINVOPP_{it}+\ \beta_6 InCHit+\ \varepsilon_{it} \quad (1)$$

where ROA represents the return on the asset, which was used to proxy financial performance. $\beta_0$is the constant term, whereas β_1 to β_6 are the coefficients of the main variable of interest and control variables, and ε_{it} captures the stochastic error term.The a priori expectation for β_1 to $\beta_6$is positive to show the relationship between independent variables and ROA.

Table 1. Measurements of variables

Variables	Source	Empirical References
Return on Asset (ROA) Natural logarithm of PBIT divided by total assets	Audited Annual Reports	Thanatawee (2011)
Turnover Ratio (TOR) Natural logarithm of the share traded volume divided by outstanding shares	NSE, factbooks, daily official list	Banerjee *et al.* (2007); Brockman *et al.* (2007)
Financial Leverage (FINLEV) Natural logarithm of Long-term debt: total assets	Audited Annual Reports	Hardianto and Herlina (2010); Lee and Yoon (2017)
Firm Age (FAGE) Natural logarithm of firm age	Audited Annual Reports	Salawu and Olayinka (2016)
Cash Holding (CH) Natural logarithm of cash & cash equivalent divided by total asset	Audited Annual Reports	Lozano and Caltabiano (2014)
Investment Opportunity (INVOPP) Natural logarithm of [(net non-current $assets_{t-1}$ – net non-current $assets_{t-1}$)/ net non-current $assets_{t-1}$]	Audited Annual Reports	Salawu and Olayinka (2016)
Firm Size (FS) Natural logarithm of market capitalization	Audited Annual Reports	Chowdhury and Jannatunnesa (2017)

Notes: The return on asset is the independent variable, whereas turnover ratio is the main variable of interest. The rest of the variables are control variables.

Source: Authors' computation

3.2. Descriptive statistics

Having a good understanding of the variables prior to estimation is essential in reducing the problem of outliers in the variables. To properly understand the variable distribution, mean, median, minimum, maximum, standard deviation, skewness, and Kurtosis and Jaque-Bera

statistics were determined in Table 2. The variable of CH reported a mean of 0.0903 and a median of 0.0419. This implies that the variation in CH is high.

Also, firm leverage had an average value of 0.2230, and its median value stood at 0.1161. It reported kurtosis with a value of 175.789. This means that the variation in firm leverage is relatively minimal in the years covered by the study. The average firm size was 8.6469, and the median was 8.6336. It exhibited negative skewness with a value of -0.6404 and a kurtosis of 175.7890. The average ROA and TOR of the firms were 0.7142 and 0.2336, respectively. This revealed that the two variables showed high consistency and low changes during the periods considered. The result of Jarque-Bera statistics revealed that all variables of interest have a p-value less than 0.05 due to the nature of the variables considered. Sequel to this, the dataset's characteristics were considered when the model was to be estimated. The assumption of either fixed or random effect was as well made.

Table 2. Descriptive statistics

	Mean	Median	Max.	Min	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Prob.	Obs.
ROA	0.7142	0.0467	73.9767	-2.0223	6.3048	10.6207	117.5859	220127.5	0.0000	389
TOR	0.2336	0.1140	9.1620	0.0000	0.5568	11.3428	173.2874	478347.5	0.0000	389
CH	0.0903	0.0419	5.4691	-1.9829	0.3583	7.8477	137.3835	296698.0	0.0000	389
FINLEV	0.2230	0.1161	8.9584	0.0000	0.5446	11.5973	175.7890	490103.8	0.0000	387
FAGE	1.6079	1.6628	1.9445	0.8451	20.1195	-0.1377	2.4544	6.2250	0.0444	400
FS	8.6469	8.6337	12.0315	0.0000	1.9249	-0.6404	4.5224	63.9888	0.0000	388
INVOPP	-5660.39	-0.0528	7.2215	-2196.03	111495.3	-19.6215	386.0026	2396401	0.0000	388

Note: ROA denotes return on asset, whereas TOR is turnover ratio, CH is cash holding, FINLEV is financial leverage, FAGE is firm age, FS is firm size, and INVOPP is investment opportunity.
Source: Author compilation

The correlation test in Table 3 shows that CH does not exhibit a profound correlation with other explanatory variables in the model. In general, explanatory variables do not report a strong correlation with each other. This implies that the model does not carry the risk of understating or overstating the standard error due to a high correlation.

Table 3. Correlation matrix

	CH	FAGE	FINLEV	FS	INVOPP	ROA	TOR
CH	1.000						
FAGE	-0.0568	1.000					
FINLEV	0.0528	-0.0743	1.000				
FS	-0.1199	-0.0713	0.0556	1.000			
INVOPP	0.0037	0.0506	0.0137	0.0510	1.000		
ROA	0.0273	-0.1956	-0.0447	-0.1169	0.0054	1.000	
TOR	0.0411	0.0297	-0.0795	-0.0701	0.0182	0.0086	1.000

Note: ROA denotes return on asset, whereas TOR is turnover ratio, CH is cash holding, FINLEV is financial leverage, FAGE is firm age, FS is firm size, and INVOPP is investment opportunity.
Source: Authors' compilation

3.3. Unit root test

The panel unit root test in Table 4 was carried out to strengthen and guarantee robustness and enhance the results' assurance and dependability. Essentially, this would ascertain the variables' order of integration. The rule of the technique is that the null hypothesis should not hold if the p-value is below 5%, while the alternative hypothesis will then hold. Therefore, with the below-stated result, it is affirmed through Levin, Lin & Chu test that the null hypothesis could not hold, which means all the variables are stationary at levels.

Table 4. Unit root test

	Levin, Lin & Chu Test		Im, Pesaran and Shin W-stat		Remark
Variable	**Statistics**	**p-value**	**Statistics**	**p-value**	
CH	-10.421***	0.000	-3.298***	0.000	I(0)
FAGE	-4.444***	0.000	-2.641***	0.010	I(0)
FINLEV	-38.048***	0.000	-2.002**	0.023	I(0)
FS	-26.664***	0.000	-7.457***	0.000	I(0)
INVOPP	-23.765***	0.000	-2.827***	0.002	I(0)
ROA	-20.563***	0.000	-4.552***	0.000	I(0)
TOR	-20.777***	0.000	-3.152***	0.001	I(0)

Note: ROA denotes return on asset, whereas TOR is turnover ratio, CH is cash holding, FINLEV is financial leverage, FAGE is firm age, FS is firm size, and INVOPP is investment opportunity. *** denotes significance at 1% level and ** denotes significance at 5%.

Source: Authors' compilation

4. Findings and discussion

Regression analysis was used to achieve the research objective considering the result of the Hausman test. Subsequent to this, descriptive statistics, correlation analysis, and unit root tests were obtained. This study adopted panel regression. Table 5 shows the results for the estimated model. The serial correlation and heteroskedasticity test results indicate the model's freedom from heterogeneity and different variances. The F-statistics of the model (23.7182) show the model's significance level at 5%. The R-square value shows that the independent variables accounted for 55.6% of the variation in the model.

Also, the regression analysis results in Table 5 were estimated using the fixed- and random-effects panel methods. The random effect assumption is the best fit since the p-value is not significant at 5%. In line with this result, the study adopted a random-effects model.

Table 5. Summary result of the regression analysis

	Random Effect			Fixed Effect		
	Coefficient	**t-statistics**	**p-value**	**Coefficient**	**t-statistics**	**p-value**
TOR	0.0430**	2.2862	0.0229	0.0244	0.1215	0.9033
FAGE	0.0664***	2.9791	0.0031	0.0643***	2.8823	0.0042
FINLEV	-0.2990	-1.0238	0.3066	-0.2034	-0.7446	0.4569
FS	0.4251**	2.4722	0.0139	0.4315***	2.5616	0.0108
INVOPP	0.1278***	2.8732	0.0043	0.0984***	2.6141	0.0093
CH	0.0147	0.0251	0.9799	0.0282	0.0470	0.9625
Constant	7.9413***	2.7747	0.0058	7.8663***	2.9529	0.0033
R-squared		0.5560			0.4634	
Adjusted R-squared		0.4911			0.4306	
F-statistic		23.7182			11.9378	
Prob(F-statistic)		0.0000			0.0000	
Hausman test				2.9069 (p= 0.8204)		
Panel Cross-section Heteroskedasticity LR Test				47.1685 (p=0.3354)		
Serial Correlation test				-1.7002 (p=0.0891)		

Note: ROA denotes return on asset, whereas TOR is turnover ratio, CH is cash holding, FINLEV is financial leverage, FAGE is firm age, FS is firm size, and INVOPP is investment opportunity. *** denotes significance at 1% level and ** denotes significance at 5%.

The result of the model in Table 5 revealed that the stock turnover ratio influences the performance of the companies by the coefficient of 0.0430. At a 5% significance level, this revealed a significant relationship between the two variables. The finding indicates that stock market liquidity tends to boost the companies' financial outcomes. The economic implication of this result is that the level of performance of companies in Nigeria is commensurate with the

liquidity status of their stocks. The discovery of the positive relationship between stock liquidity and performance in this study agrees with the findings of Eze *et al.* (2019), Florence *et al.* (2017), Nguyen *et al.* (2016), Olayinka (2019), Singh *et al.* (2015), Sidhu (2016), and Singh (2017).

Moreover, all the control variables except financial leverage positively influence performance. Firm age exhibits a direct connection with companies' performance. This means that companies with long periods tend to perform better than the upcoming companies. This is consistent with the studies of Singh (2017) and Sidhu (2016).

Firm size (FS) also exhibited a positive relationship with the companies' performance. This implies that larger companies have several opportunities, such as easy access to funds, low cost of production, and due to the economics of large scale, to boost their performance compared with the small companies. This agrees with the findings of (Arian *et al.* 2014; Sidhu, 2016)

Investment opportunity exhibited a positive association with the dependent variable of performance. This implies that companies with more investment opportunities have every privilege to enhance their performance. The more investment opportunities opened to a company, coupled with the ability to embrace them, the better its performance will be.

Similarly, cash holding and performance have a positive but weak relationship. This finding indicates that the extent of the liquidity status of a company has a moderate influence on its performance. A company that can meet its financial obligations when due enjoys a deal of trust from its stakeholders, especially its financiers, which will boost the company's public image and make it an attraction to all and sundry and invariably enhance the performance. This supports the claim of Kanga and Achoki (2016).

Lastly, the result revealed a link between financial leverage and performance. This result implies that when a company finances its investment through debt, there is a tendency for its performance to be adversely affected. This is possible because leverage multiplies potential downside risk if the investment does not work out as planned.

5. Conclusion

Few empirical studies in developed and developing economies on the effect of liquid stock on performance are marred with diverse findings. Therefore, this aspect still needed to be well-researched for the case of Nigeria. The lacuna in the literature on Nigeria was the concern of this study. Based on the result of the random-effects regression, the study concludes that the stock turnover ratio is positively associated with the performance of companies. It is observed that when ownership is dispersed as a result of stock liquidity, managers are motivated to hold more control to entrench outsiders and make better decisions without fear to boost the company's corporate performance.

The economic implication of this result suggests that the level of companies' performance in Nigeria is commensurate with the liquidity status of their stocks. However, to ensure better performance, several policies that will encourage other stakeholders in stock participation should be put in place, and adequate attention should be paid to the liquidity status of companies in Nigeria when determining the factors which influence performance.

The main limitation of this study is the consideration of only the non-financial quoted companies in Nigeria. Therefore, future studies could consider the entire quoted companies in Nigeria to get a more comprehensive view of the relationship between stock liquidity and performance.

References

Alos, A. J., 2000. Creating value under uncertainty: The Nigerian experience. *Journal of African Business*, 1(1), pp. 9-24. https://doi.org/10.1300/J156v01n01_03

Alusa, E. J. and Kalui, F. M., 2021. Influence of stock market liquidity on performance of firms listed in Nairobi securities exchange in Kenya. *International Journal of Business Management and Processes (IJBMP),* 5(4), pp. 34-53.

Aybar, O., Bilgin, M. H., and Ozturk, S. S., 2020. Time dynamics of connectedness between commodity convenience yields and zero-coupon inflation swap rates. *Investment Analysts Journal,* 49(4), pp. 289-302. https://doi.org/10.1080/10293523.2020.1794309

Banerjee, S., Gatchev, V. A., and Spindt, P.A., 2007. Stock market liquidity and firm dividend policy. *Journal of Financial and Quantitative Analysis,* 42(2), pp. 369-398. https://doi.org/10.1017/S0022109000003318

Bostanci, F., Kadioglu, E., and Sayilgan, G., 2018. Determinants of dividend payout decisions: a dynamic panel data analysis of Turkish stock market. *International Journal of Financial Studies,* 6(4), p. 93. https://doi.org/10.3390/ijfs6040093

Brockman, P., Howe, J. S., and Mortal, S., 2008. Stock market liquidity and the decision to repurchase. *Journal of Corporate Finance,* 14(4), pp. 446-459. https://doi.org/10.1016/j.jcorpfin.2008.06.001

Chowdhury, T. A. and Jannatunnesa, J., 2017. Stock market investors' guide to corporate dividend policy: evidence from pharmaceuticals and chemicals industries in Bangladesh. *Asian Journal of Finance & Accounting,* 9(1), pp. 166-191. https://doi.org/10.5296/ajfa.v9i1.10871

Dalvi, M. R. and Baghi, E., 2014. Evaluate the relationship between company performance and stock market liquidity. *International Journal of Academic Research in Accounting, Finance and Management Sciences,* 4(1), pp. 193-205. https://doi.org/10.6007/IJARAFMS/v4-i1/550

Donaldson, L. and Davis, J. H., 1994. Stewardship theory or agency theory: CEO governance and shareholders returns. *Australian Journal of Management,* 16(1), pp. 49-64. https://doi.org/10.1177/031289629101600103

Eze, O. R., Ini, S. U., Ugwu, O. J., and Onwe, B. U., 2019. Stock market liquidity and manufacturing sector performance in Nigeria: an application of error correction model. *European Journal of Scientific Research,* 153(4), pp. 420-433.

Fang, V., Noe, T., and Tice, S., 2009. Stock market liquidity and firm performance. *Journal of Financial Economics,* 94(1), pp. 150-169. https://doi.org/10.1016/j.jfineco.2008.08.007

Florence, O.A., Ogechi, I.A., Kingsley, O.O., Idika, J.E., and Odili, O., 2017. Impact of stock market liquidity and efficiency on performance of the manufacturing sector in Nigeria (1985-2014). *International Journal of Economics and Financial Management,* 2(1), pp. 71-82.

Griffin, C. H., 2010. Liquidity and dividend policy: international evidence. *International Business Research,* 3(3), pp. 3-9. https://doi.org/10.5539/ibr.v3n3p3

Hardianto, B. and Herlina, D., 2010. Free cash flow prediction, debt policy and profitability on the possibility of dividend payment. *Journal of Business Management,* 3(1), pp. 53-74.

Hayek, F. A., 1945. The use of knowledge in society. *The American Economic Review*, 35(4), pp. 519-530.

Jabbouri, I., 2016. Determinants of corporate dividend policy in emerging markets: evidence from MENA stock markets. *Research in International Business and Finance,* 37, pp. 283-298. https://doi.org/10.1016/j.ribaf.2016.01.018

Jawed, M. S., 2017. *Stock price, liquidity, ownership, and firm performance: evidences from minimum public shareholding regulation in India*. Unpublished Master Thesis. India: Indian Institute of Management–Indore. [online] Available at: <http://www.iimidr.ac.in/wp-content/uploads/Stock-price-liquidity-ownership-and-firm-performance-evidence-from-minimum-public-share-holding-regulation-in-India.pdf> [Accessed on 1 September 2022].

Jiang, F., Yunbiao, M., and Beibei, S., 2017. Stock liquidity and dividend payouts. *Journal of Corporate Finance,* 42, pp. 295-314. https://doi.org/10.1016/j.jcorpfin.2016.12.005

Batten, J. and Vo, X. V., 2019. Liquidity and firm value in an emerging market. *The Singapore Economic Review,* 64(2), pp. 365-376. https://doi.org/10.1142/S0217590817470063

Kim, J. W., 2016. The effects of stock liquidity on the firm's dividend policy in Korean stock market. *Korean Corporation Management Review,* 69, pp. 25.

Ku, H., Mustapha, U. M., and Goh, S., 2010. A literature review of past and present performance of Nigerian manufacturing sector. *Journal of Engineering Manufacture,* 224(12), pp. 1894-1904. https://doi.org/10.1243/09544054JEM1818

Lee, J. H. and Yoon, B., 2017. Stock market liquidity and dividend policy in Korean corporations. *The Journal of Applied Business Research,* 33(4), pp. 731-740. https://doi.org/10.19030/jabr.v33i4.9995

Lozano, M. B. and Caltabiano, S., 2014. Cross institutional cash holding and dividend policies: focusing on Brazilian Firms. *Journal of Applied Economics,* 47(3), pp. 239-254. https://doi.org/10.1080/00036846.2014.967516

Nguyen, T., Duong, H. and Singh, H. 2016. Stock market liquidity and firm value: an empirical examination of the Australian market. *International Review of Finance,* 16(4), *pp.* 639-646. https://doi.org/10.1111/irfi.12082

Nigeria Shares Trading, 2019. *Nigeria stock exchange volume*. [online] Available at: <https//www.ceicdata.com> [Accessed on 1 September 2022].

Nigeria Stock Exchange, 2018. *Annual report*. [online] Available at: < https://africanfinancials.com/document/ng-ngxg-2018-ar-00/> [Accessed on 1 September 2022].

Omesa, J. N., 2015. *Effect of liquidity on the financial performance of financial institutions listed in the Nairobi securities exchange*. Unpublished Doctoral Dissertation. Kenya: University of Nairobi. [online] Available at: <http://erepository.uonbi.ac.ke/handle/11295/93172> [Accessed on 1 September 2022].

Kanga, O. S. and Achoki, G., 2016. Liquidity and financial performance in agricultural firms listed in the Nairobi securities exchange in Kenya. *International Journal of Business and Social Science,* 7(7), pp. 57-65.

Ojowu, N., 2003. *Speech at Nigeria's imperative in the new World trade Order, workshop report*. African economic research consortium (AERC). Nairobi, Kenya and trade policy research and training program (TPRTP). Department of economics, University of Ibadan: Ibadan.

Olayinka, S. W., 2019. Market liquidity and corporate performance in Nigeria: Granger causality test. *Specialty Journal of Accounting and Economics,* 5(1), pp. 8-18.

Olayinka, S. W., Fanneh, M. M., and Salawu, R. O., 2021. Liquid stock and dividend payment of non-financial quoted companies in Nigeria. *Universal Journal of Accounting and Finance,* 9(6), pp. 1366-1376. https://doi.org/10.13189/ujaf.2021.090615

Arian, O., Galdipur, S. and Kiamehr, J., 2014. Impact of stock market liquidity on firm value. *Journal of Educational and Management Studies,* 4(4), pp. 782-786. [online] Available at: <https://jems.science-line.com/attachments/article/27/J.%20Educ.%20Manage.%20Stud.,%204(4)%20782-786,%202014.pdf> [Accessed on 1 September 2022].

Pham, C. H., Le, H. D., Dang, H. Q., Ta, P. T., Nguyen, C. M., and Tu, U. B., 2020. Investor protection, stock liquidity, and firm value. *Academy of Accounting and Financial Studies Journal,* 24(3), pp. 1-12. [online] Available at: < https://www.proquest.com/docview/2416931225/abstract/8D27A07EB4A44547PQ/1?accountid=9652> [Accessed on 1 September 2022].

Pike, R. and Neale, B., 2016. *Corporate finance and investment.* 5th ed. Essex: Pearson Education Limited.

Russell, J. R. and Engle, R. F., 2010. *Handbook of financial econometrics: tools and techniques.* Amsterdam: Elsevier.

Solomon, 1963. *The theory of financial management.* Columbia: Columbia Press.

Salawu, R. O. and Olayinka, S. W., 2016. Stock market liquidity and investment decisions of non-financial quoted companies in Nigeria. *Journal of Economics and Business Research,* 22(2), pp. 205-226.

Sawitri, A. N. and Sulistyowati, C., 2018. Stock liquidity and dividend policy. *KnE Social Sciences*, 3(10), pages 1192-1202. https://doi.org/10.18502/kss.v3i10.3461

Sidhu, M. K., 2016. Stock market liquidity and firm value - Indian evidences. IOSR *Journal of Business and Management (IOSR-JBM),* pp. 54-59. https://doi.org/10.9790/487X-15010020254-59

Singh, T., Gupta, M. and Sharma, M., 2015. Stock market liquidity and firm performance. *Accounting,*1(1), pp. 29-36. https://doi.org/10.5267/j.ac.2015.11.003

Singh, T., 2017. Stock market liquidity and firm performance. *American-Eurasian Journal of Scientific Research,* 12(1), pp. 37-46.

Thanatawee, Y., 2011. Life-cycle theory and free cash flow hypothesis: evidence from dividend policy in Thailand. *International Journal of Financial Research,* 2(2), pp. 52-60. https://doi.org/10.5430/ijfr.v2n2p52

Yusuf, R. A., 2019. Factors influencing dividend payout policy of firms listed on the Nigerian stock exchange. *Advances in Economics and Business,* 7(6), pp. 256-265. https://doi.org/10.13189/aeb.2019.070602

Zhang, L., Li, Y., Huang, Z., and Chen, X., 2018. Stock liquidity and firm value: evidence from China. *Applied Economics Letters,* 25(1), pp. 47-50. https://doi.org/10.1080/13504851.2017.1293779