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Original Article

Effect of Liquidity and Stock Price on Dividend Payout of Listed Deposit Money Banks in Nigeria

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Abstract: *This study examined the effect of liquidity and stock price on the dividend payout of listed DMBs in Nigeria. Based on the requirements that the bank must have been listed prior to December 31, 2019, and possess comprehensive annual reports covering a five-year period (2019–2023), 11 banks were purposefully chosen as a sample. The data was analyzed using panel regression analysis and descriptive statistics, and the study's findings showed that the current ratio significantly and favorably affects the dividend distribution of Nigeria's listed DMBs. However, when the stock price was introduced as a moderator, the result shows that both the current ratio and cash flow have a positive and significant effect on the dividend payout of the banks. Therefore, with the goal of improving dividend payout, this study advises the management of listed DMBs in Nigeria to decrease current liability and boost debtor gathering, cash at the bank, and stock price.*

Keywords: *Deposit Money Banks, Dividend Payout, Liquidity, Nigeria, Stock Price.*

I. INTRODUCTION

The banking industry is one of the fundamental economic industries that moderate and influence national economic development. Banks function as economic intermediaries where available savings are mobilized and channelled through credit facilities to other economic sectors that have liquidity deficits. The rate of investments and the amount of liquid assets available are believed to have a significant influence on banks' survival [1]. Consequently, the investment decision of investors is determined by the stock price, business profitability and dividend policy of the bank [2].

Dividend is one of the most important elements on financial statements that attracts the attention of both potential and existing investors. It is the proportion of bank profit after tax that is distributed to equity shareholders. Unlike interest on debt, the dividend is paid only when the company's directors vote for matters. Thus, the proportion of the amount of profit after tax to payout as a dividend determines the amount of retained earnings of a firm. Hence, [3] and [4] emphasized that dividend decision is a critical finance function that involves the determination of the amount of profit after tax to share to shareholders as earnings and the amount to retain. Thus, [1] earlier concluded that the proportion of dividend payout is further influenced by firms' liquidity position and the stock price since payment of dividends means cash outflow. Even with significant earnings, a company might not have enough cash on hand to pay dividends. As a result, the firm's liquidity position plays a crucial role in determining its ability to pay dividends; the stronger a company's liquidity position, the greater its ability to do so.

Given the importance of banks' liquidity and stock price in ensuring prompt dividend declaration and payment, there is still a paucity of empirical studies on the complementary role of firms' stock price and liquidity position. Thus, in studying the determinant of firms' dividend policies, [5] and [1] assert that firms' financial position, such as liquidity and market factors, such as stock price, would have a significant influence on the dividend policy of a firm. However, only a few studies empirically examined the complementary role of firms' liquidity position and firms' stock price in promoting effective dividend payment. Furthermore, a few studies, such as [6] in Indonesia, [1] in Kenya, and [7] in Europe were of foreign context. Because of the disparities in the political, social, business, and economic systems, the results could prove to be relevant in Nigeria. Thus, the motivation to empirically examine the moderating effect of the stock price on the relationship between liquidity and dividend payout of listed deposit money banks in Nigeria.

The following theories were created to direct the investigation in order to meet the goals of the study that were previously mentioned.

H_{o1}: Liquidity has no significant effect on the dividend payout of listed deposit money banks in Nigeria.
H_{o2}: Stock price has no significant moderating effect on liquidity and the dividend payout of listed deposit money banks in Nigeria.

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This study is interesting because it modifies the connection between liquidity and the payout of dividends of registered DMBs in Nigeria by looking at the stock price's moderating effect. The study's findings support its central claim, which is it sufficient liquidity with moderate stock price would significantly improve banks' dividend payment decisions. Therefore, this study is structured into five sections. After the introductory portion, the approach used in the study was explained in section three, the findings and discussions were presented in section four, the conclusion and recommendations were provided in section five, and the research methodology was reviewed in section two.

II. LITERATURE REVIEW

A) Dividend Payout

The concept of dividend was defined by [1] as a fair payment given to equity shareholders on their investment. Unlike interest on debt, the dividend is paid only when directors declare. The decision for the payment of dividends is crucial since it is believed to influence the liquidity position of an entity. Thus, [6] stressed that a dividend policy is necessary because it ensures the availability of funding as well as the growth and valuation of a firm. The proportion of the distribution of dividends should be done by considering factors such as firms' liquidity with respect to the current ratio and cash ratio, debt-to-equity ratio, and business risk as well as market dynamics such as stock market price [8].

B) Liquidity

The concept of liquidity refers to the amount of money available to banks for investment [9]. It is an indicator of a firm's ability to convert current assets into cash [6]. The more liquid an asset is, the faster it can be converted into cash. A firm's liquidity position is a crucial element that informs stakeholders of the firm's ability to meet up with short-term obligations as well as investments. Thus, [10] and [11] highlighted that high liquidity indicates healthy firm performance because, with a good level of liquidity, firms could find it easier to meet dividend payment obligations. Thus, to improve firms' liquidity company should improve its operational activities, investing activities, and financing activities. The acceptability of a firm in a capital market is revealed in its stock price. The higher the stock price, the higher the performance of a firm [12]. Thus, [2] and [13] believed that stock price would have a significant influence on the liquidity position of a firm.

C) Stock Price

The concept of stock price is seen as an indicator for assessing business success. Thus, [8] believed that consistent increases in stock price would have a significant influence on investors' decision-making. It indicates successful business management. Therefore, winning over investors' trust is essential since it makes it more likely that investors will invest in a given firm, which raises the demand for the stock of the business and drives up the stock price. If high stock prices are maintained, investors will have high confidence in the company's ability to remain sustainable. Hence, the impact would be an increase in the liquidity and value of the company [14]. The rise and fall of stock prices are common due to economic variables such as supply and demand. An increase in demand for stock increases the price of the stock as well as liquidity and dividend payout; otherwise, if the supply is high, the price will go down, hence affecting the liquidity position and dividend payment of a company. Thus, the motivation of this study is to empirically examine the moderating effect of the stock price effect of liquidity and stock price on the dividend payout of listed deposit money banks in Nigeria.

D) Empirical Review

[1] examined the effect of liquidity on the dividend payout of 30 listed firms in Nairobi, Kenya. The required data was collected for the period of five years (2008-2012) from the annual reports and accounts of the selected companies and was analyzed using regression analysis. Thus, the study reported a positive and significant relationship between liquidity and dividend payout of the companies.

However, a contrary result was documented by [6], who examined how seventeen major consumer products businesses registered on the Indonesian stock exchange decided to set their dividend policies in relation to liquidity, solvency, and business risk. The required data was collected from annual reports and accounts of the selected companies over a period of five years (2016-2020) and was analyzed using ordinary least square regression. Thus, the study reported an insignificant effect of liquidity on the dividend payout of the companies. This outcome supported the prior findings published by [15], who looked at how liquidity affected the dividend payments made by ten Nigerian consumer goods companies that were listed. Panel regression analysis was utilized to examine data that was gathered from the companies' annual reports and accounts spanning ten years (2010-2019). The research revealed little correlation between the companies' dividend payout and liquidity.

[5] examined the effect of profitability and liquidity on the dividend policy of ten food and beverage companies. The required data was collected from annual reports and accounts of the firms for a period of five years (2017-2021). Data was analyzed with panel regression analysis, and the results show that liquidity has a negative and significant effect on the dividend payout of the companies over the period of the study. More so, [7] examined the effect of liquidity on dividend payments of listed companies in Europe. The necessary information was gathered from the organization's annual reports and accounts for five

years (2016-2020). Regression analysis was used to evaluate the data, and the results showed that, over the course of the study, liquidity had an adverse and substantial effect on the companies' ability to pay dividends.

With respect to the effect of liquidity on stock price, [3] studied stock liquidity and stock returns of 113 listed Indonesian companies while adopting financial constraints as a moderator. The required data was collected from annual reports and accounts of the banks for the period of four years (2015-2019) and analyzed using regression analysis. The study's conclusion demonstrates that liquidity significantly and favorably impacted stock returns. This result supported the results of [2] that evaluated stock liquidity and stock price crash risk of 9,285 companies. The required data was collected from annual reports and accounts for the period of 18 years (1993-2010) and was analyzed using regression analysis. Over the course of the analysis, the study found that liquidity had a favorable and significant impact on the stock prices of the companies. However, [8] evaluated the effect of economic value added, leverage and liquidity on stock price of 71 listed manufacturing companies in Indonesia. The data was collected from annual reports and accounts of the selected companies for three years (2018-2020) and was analyzed using partial regression analysis. The study's findings indicate that while economic value added had no discernible impact on stock prices, liquidity and leverage did have positive and significant effects.

E) Theoretical Review

Previous academics have examined the ideas of liquidity, dividends, and stock price using a number of theories. A few theories, as mentioned by [5] and [8], include Signaling Theory, Agency Theory, and Shareholders Theory. However, this study is anchored on Shareholders Theory.

The basic assumption of Shareholder Theory states that the primary responsibility of a firm is to maximize shareholder value [16]. Profit-making businesses do this on the grounds that shareholder interests take precedence over those of other stakeholders. According to the theory of shareholders, management should work to foster shareholder cooperation in order to raise the value of the business. Furthermore, management should carry out activities that would maximize profits and minimize losses. To achieve this goal, management should efficiently use firms' available resources to generate profits. In the daily operation of a firm, management should employ all existing resources of a firm, such as human capital, physical capital, and structural capital that would guarantee the maximization of owners' wealth. The efficient utilization and management of these resources are believed to increase firms' value and subsequently benefit shareholders. All gains resulting from business management operations are meant to be distributed as dividends to shareholders. The theory further explains that, if a company is not operating for the benefit of its shareholders, the company will face going concern challenge. Therefore, shareholder theory forces companies to focus most on the financial performance and benefits of shareholders.

III. METHODOLOGY

The organization and methodology of this study were established using the correlation research design. As of December 31, 2023, there were fourteen Deposit Money Banks listed in Nigeria, making up the target population. Additionally, the study employed purposive sampling approaches to choose 11 of the 14 banks for the sample. These banks had to meet two requirements: they had to be fully operational throughout the study period (2019–2023) and have been listed on or before December 31, 2019. Descriptive statistics and panel regression analyses were used to evaluate the necessary data, which was gathered from the annual reports and accounts of the chosen institutions.

A panel regression model was developed based on the model used by [15] to test the hypotheses raised. The variables used are liquidity (CRR, CAR) as an independent variable, dividend payout (DPR) as the dependent variable, stock price (STP) as the moderating variable, while firm's characteristics (ROA, FML) as the control variable.

Thus, two models were developed and are presented as follows.
Model 1 was developed to evaluate the direct effect of liquidity on the dividend payout of the banks.

$$DPR_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 CAR_{it} + \beta_3 STP_{it} + \beta_4 ROA_{it} + \beta_5 FML_{it} + \mu_{it} \text{ ..... Model 1}$$

Model 2 was developed to observe the moderating effect of the stock price on the relationship between liquidity and dividend payout of the banks.

$$DPR_{it} = \beta_0+\beta_1 CRR_{it}+\beta_2 CAR_{it}+\beta_3 STP_{it}+\beta_4 CRR_{it}*STP_{it}+\beta_5 CAR_{it}*STP_{it}+\beta_6 ROA_{it}+\beta_7 FML_{it}+ \mu_{it}$$
$$\text{..... Model 2}$$

The study variables, which provide details about the proxies utilized and their numerous sources, are shown in Table 1.

Table 1: Variable identification and measurement

SN	Label	Variable	Description	Source
1	DPR	Dividend payout ratio	Dividend paid for the year divided by profit after tax	[5]
2	CRR	Current ratio	Current assets divided by current liabilities	[1]

3	CAR	Cash ratio	Cash in hand plus banks' balance divided by current liabilities	[1]
4	STP	Stock price	Natural logarithms of share price at the end of the accounting period	[8]
5	ROA	Returns on assets	Profit Before Tax (PBT) at the year-end divided by total assets	[17]
6	FML	Firms leverage	Debt to equity ratio	[7]

IV. RESULTS AND DISCUSSIONS

Table 2 displays the results of descriptive statistics that were used to examine the features and structure of the data obtained using mean, standard deviation, minimum, and maximum values.

Table 2: Descriptive Statistics

Variables	Mean	Std. Div.	Min. Value	Max. Value
DPR	.5101	1.1994	.0034	.8500
CRR	.6934	.1117	.0694	.8736
CAR	.7876	.0891	.5888	.9404
STP	.4056	.8491	.1072	. 6383
ROA	.1034	.0653	.0142	.3872
FML	.02908	1.0504	1.7447	1.0674

Source: *STATA 13 Descriptive Statistics Results (2024)*

Table 2 shows that the Dividend Payout Ratio (DPR) has an average value of .5101 that falls in between a minimum value of .0034 and a maximum value of .8500 with a standard deviation of 1.1994. This implies that there was a consistent declaration of dividends by the banks on an average of 51.01% of the profit after tax that was partially dispersed. Furthermore, the Current Ratio (CRR) has an average value of .6934, between the minimum value of .0694 and the maximum value of .8736, with a standard deviation of .1117. At the same time, the cash ratio (CAR) revealed an average value of .7876 with a standard deviation of .0891, a minimum value of .5888 and a maximum value of .9404. Stock price has a mean value of .4056, minimum of .1072, maximum of .6383 and standard deviation of .8491.

Table 3 included correlation analysis, which used Pearson instant correlation to ascertain the association between the study's variables in light of the findings of the descriptive statistics, which examined the characteristics and patterns of the data gathered.

Table 3: Correlation Matrix

Variables	DPR	CRR	CAR	STP	ROA	FML
DPR	1					
CRR	.3017	1				
CAR	.4121	-.2241	1			
STP	.5721	.7105	.3142	1		
ROA	.0523	.4122	-.5132	.3297	1	
FML	.2844	.7108	.5291	.4122	-.3223	1

Source: *Correlation Matrix-STATA 13 (@ 5% Level of Significant)*

The result of the correlation analyses in Table 3 revealed a moderate correlation between stock price (STP) and dividend payout (DPR), stock price and current ratio (CRR), firms leverage (FML) and current ratio, returns on assets (ROA) and cash ratio (CAR), and firms leverage and cash ratio. However, others show weak or low correlations. With respect to the direction of correlation, the correlation between returns on assets and cash ratio and firms' leverage and returns on assets were found to be negative, while others revealed positive correlations.

The correlation results in Table 3 further show that there was no problem of multicollinearity among the variables of the study since the highest correlation coefficient of 0.7108 is the correlation between firms leverage and current ratio is less than 0.800 critical level of multicollinearity problem [18].

In order to perform regression analysis, Durbin Watson test statistics, standard skewness, standard kurtoses, and inflation factor variance were used in a diagnostic test; the results are shown in Table 4.

Table 4: Result of VIF, Standard Skewness, Standard Kurtosis, and Durbin Watson test

	VIF	1/VIF	Std. Skewness	Std. Kurtosis
CRR	2.8794	.3473	.3595	.9725

CAR	4.6119	.2168	.0000	.0092
STP	3.7494	.2667	.9458	.0006
ROA	3.3240	.3008	.7033	.0018
FML	1.9732	.5068	.2359	.0000
Durbin Watson test = 1.7133				
Chi^2-prob. = 0.0000				

Source: *STATA 13 Output @ 5% significant level*

According to Table 4's diagnostic outcome, all of the explanatory variables' standard skewness and standard kurtosis values were less than ±1.96 and ±3, respectively, at the 5% significant level, indicating that the data had a normal distribution. Additionally, there is no multicollinearity case because the tolerance coefficient and VIF findings are below the cutoffs of 1 and 10, respectively [18]. Regarding autocorrelation, the Durbin-Watson test statistic of 1.7133 is smaller than the conventional value of 2, indicating that there is no autocorrelation issue among the study's components [19]. Since the Hausman model specification test result, of.0000 is important, the fixed effect was chosen above the random effect.

Since there were no issues with autocorrelation or multicollinearity and the data had a normal distribution, a regression analysis was performed, with the results shown in Table 5.

Table 5: Regression Results

	Model 1		**Model 2**	
	Coefficient	**p-value**	**Coefficient**	**p-value**
Intercept	.2092	.0401	.5132	.0014
CAR	.1354	.0100	.6930	.0355
CAF	-.0562	.7912	.2263	.0053
STP	.1437	.3184	.2827	.0293
ROA	.0240	.1289	.2318	.0016
FML	.0008	.2485	.3105	.7123
CAR* STP			.4901	.0063
CAF* STP			.1347	.0042
R^2	= .7200		= .6072	
Adj. R^2	= .6389		= .5084	

Source: *STATA 13 Output @ 5% Significant Level*

Table 5 Model 1 revealed R2 of .7200 and Adjusted R2 of .6389. This implies that the variables in model 1 accounted for 72% of the variation in the dividend payout of the banks, while other factors could explain 28%. More so, model 1 as a whole is significant and has a good predictive power given the intercept p-value of 0.0401 at a 5% level of significance.

The result further shows that the current ratio (CRR) has a significant positive direct effect on dividend payout (DPR) at 5% significant level (β= .1354; p =.0100). This implies that an increase in current assets above current liabilities may increase the dividend payout of the banks. While the cash ratio (CAR) shows a negative and insignificant direct effect on the dividend payout of the banks at a 5% significant level (β= .1354; p =.0100). This means that an increase in cash flow does not mean an increase in banks profit after tax that may result in an increase in the proportion of the payment of dividends. Furthermore, the stock price (STP) shows a positive but insignificant direct effect (β= .1354; p =.0100) on the dividend payout of the banks. This means an increase in stock price would positively increase the dividend payout of the banks but insignificantly. In aggregate, the regression result of model 1 implies that liquidity has no significant effect on the dividend payout of the banks. This corroborated the earlier findings of studies such as [6] and [15], which also reported an insignificant effect of liquidity on dividend payout. However, it is contrary to the results of [1], which reported a positive relationship between liquidity and dividend payout, while [5] and [7] reported a negative relationship between liquidity and dividend payout.

However, Table 5 model 2 shows an R2 value of .6072 and adj. R2 of .5084 implies that when a stock price was introduced as a moderating variable, the explanatory variables in model 2 accounted for a 60.72% variation in dividend payout (DPR). More so, model 2 is found to be significant (β= .5132; p =.0014) at 5%, indicating goodness of fit and predictive power of the model. Furthermore, the current ratio (CRR) remained positive and significant (from β= .1354; p =.0100 to β= .4901; p =.0063) when the stock price was introduced as a moderator, while cash ratio became positive and significant (from β= -.0562; p =.7912 to β= .1347; p =.0042). This implies that an increase in stock price would significantly and positively increase the dividend payout of the banks. These results corroborated the findings of studies such as [2], [3], and [8], which also reported a positive and significant effect of stock price on liquidity and dividend payout in different contexts over different timeframes. Thus, this study concluded that stock prices have a positive and significant moderating effect on the current ratio and dividend ratio, cash ratio and dividend ratio of the banks.

V. CONCLUSION AND RECOMMENDATIONS

The findings of this study revealed that the current ratio has a direct positive and significant effect on dividend payout. In contrast, the cash ratio shows a negative and insignificant effect on dividend payout. Stock price shows a negative but insignificant effect on the dividend payout of the banks over the period of the study. However, after introducing stock price as a moderating variable, the study shows that stock price has a positive and significant moderating effect on the relationship between the current ratio and dividend ratio, cash ratio and dividend ratio. Therefore, this study concluded that stock price has a positive and significant moderating effect on liquidity and dividend payout of listed deposit money banks in Nigeria. This implies that an increase in stock price and current assets without a corresponding increase in liability would significantly and positively influence the dividend payout of the banks.

Therefore, this study recommends that the management of listed DMBs in Nigeria should reduce current liability and increase debtor collection and cash at hand and bank while improving its stock price. This will improve the liquidity position of the banks without increasing liability, hence increasing the dividend payout.

VI. REFERENCES

[1] Olang, M. A., Akenga, G. M., & Mwangi. J. K. (2015). Effect of Liquidity on the dividend payout by Firms Listed at the Nairobi Securities Exchange, Kenya. *Science Journal of Business and Management, 3*(5), 196-208. doi: 10.11648/j.sjbm.20150305.18

[2] Chang, X., Chen, Y., & Zolotoy, L. (2017). Stock liquidity and stock price crash risk. *Journal of Financial and Quantitative Analysis, 52*(4), 1605-1637. Doi: 10.1017/S0022109017000473

[3] Febrianti, V. D., & Saadah, S. (2023). Stock liquidity and stock returns: The moderating role of financial constraints. *Journal of Accounting and Investment*, *24*(2), 292-305.

[4] Samuel, S. E. & Gbegi, D. O. (2010). Dividend policy, liquidity constraint, and firms' investment in Nigeria: An empirical analysis. *Continental Journal of Social Sciences, 3*, 69-74.

[5] Susetyo, D. P., Frankus, A. G., & Firmansyah, D. (2023). The effect of profitability and liquidity on dividend policy. *International Journal of Management and Business Intelligence*, *1*(2), 143-158.

[6] Sugiano, D. & Maran (2022). The effect of liquidity, solvency, and business risk on dividend policy in primary consumer goods sector companies on the Indonesian Stock Exchange. *Proceeding 1st Tanjungpura International Conference on Management, Economics and Accounting, 1*, 262-269.

[7] Johannson, J. & Hallberg, M. (2021). Does corporate liquidity affects dividend policy? A Quantitative study on public Europeans Firms. Master's Thesis submitted to UMEA School of Business, Economics and Statistics.

[8] Bangun, N. & Natsir, K. (2023). The effect of EVA, leverage and liquidity on the stock price. *Jurnal of Akuntansi, 27*(1), 62-79.

[9] Effiong, S. A. & Enya, E. F. (2020). Liquidity risk management and financial performance: A consumer goods companies involved? *International Journal of Recent Technology and Engineering, 9*(1), 580-589.

[10] Agus, S. (2013). *Manajemen keuangan teori dan aplikasi*. Yogyakarta: BPFE.

[11] Kasmir. (2016). *Analisis laporan keuangan.* Jakarta: Raja Grafindo Persada.

[12] Fahmi, I. (2015). *Analisa kinerja keuangan.* Bandung: Alfabeta.

[13] Bali, T.G., L. Peng, Y. Shen, and Y. Tang. (2014). Liquidity Shocks and Stock Market Reactions. The Review of Financial Studies, 27(5), 1434-1485.

[14] Idris, A. (2021). The Effect of Profitability and Liquidity on Stock Prices in Food and Beverage Companies in Indonesia. *Journal of Entrepreneurship Management*, 11–20.

[15] Yahaya, O. A., Salihu, H. S., & Nuhu, B. A. (2021). Effect of liquidity of dividend payout of listed consumer goods firms in Nigeria. *The International Journal of Business and Management, 9*(2), 387-391. DOI No.: 10.24940/theijbm/2021/v9/i2/BM2102-018

[16] Langager, C., & Brock, T. (2022). Who is responsible for shareholder's interests? *Investopedi*a. https://www.investopedia.com/ask/answers/05/shareholderinterest.asp.

[17] Wijaya, D. & Pakpahan, H. M. E. (2021). The effect of liquidity, capital structure, dividend policy on firm value through profitability as intervening variable. *International Journal of Business, Economics and Law, 24*(6), 190-197.

[18] Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling.* Sage Publications

[19] Adefila, J. J. (2014). *Statistical techniques for data analysis: Demystify presentation* (1st ed.). BWright Integrated Ltd, Knogi-Bodija, Ibadan-Nigeria.