E-Dividend and Investment Performance in Stock Market among the Nigeria Deposit Money Banks

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Abstract: ***The Nigerian stock market places a high priority on dividends. Investors anticipate receiving a dividend on their capital. Dividends are earnings that can be distributed by companies; dividends that are not distributed could be viewed as retained earnings. This study investigated the moderating effect of firm size and age on the effect of electronic dividend and investment performance in the Nigerian stock market among deposit money banks. The study used secondary data from ten (10) deposit money banks collected from the Nigeria Group Exchange. The dataset was divided into two sections, pre and post - electronic dividend, employing multiple regression analysis to analyse the objective. The paper found that the result concluded that firm size and firm age significantly affected the effect of e - dividend and investment performance of the Nigeria deposit money. The study, thereby, suggested that investors should take investment information into account in order to allocate their crucial capital resources wisely, especially when analysing and assessing a bank's prospects.***

Keywords: Deposit Money Banks, Dividend Policy, Earnings, Investment Performance, Stock Market.

1. Introduction

The Nigerian stock market places a high priority on dividends. Investors anticipate receiving a dividend on their capital. Dividends are earnings that can be distributed by companies, and dividends that are not distributed could be viewed as retained earnings (Eriki, Iyoha&Adetula, 2022). So, any company's survival depends on a consistent investment policy or plan. Some individuals also believe that companies have the motive to preclude investors from receiving their money in time to keep using it (Kighir, 2003)

Due to the increasingly competitive nature of the global financial system, reforms are being introduced globally to strengthen the regulatory framework. The e - dividend payment system was launched in July 2015 by the federal government, the Central Bank of Nigeria (CBN), and other regulatory bodies. Most investors have instructed their bank accounts to send dividend payments directly using the e - dividend payment system (Eriki et al., 2022; Okpaleke, Emele& Gambo, 2014).

Addressing the issue of investment performance in Nigeria is the core purpose of the electronic dividend payment system. The Securities and Exchange Commission (SEC) and other regulating bodies launched the e - dividend payment system in July 2015. The goal was to simplify and improve the dividend process. The E - dividend Payment System uses direct credit into a designated bank account to pay investors' dividends online. Norrie. Due to significant infrastructure and economic development changes in the Nigerian capital market, the e - dividend payment system has assumed a prominent role in the economy. Furthermore, circulars were sent to public companies' capital markets, instructing them to return funds on dividends in their possession for at least fifteen (15) months. To the paying companies, the transfer documentation needed to be provided to the Commission by June 30, 2015 (Kighir, Salisu, & Samuel 2018).

Different researchers have studied dividends smoothing, such as Kighir et al. (2018), Otieno and Oloo (2013), and Abubakar (2019), among others. Researchers such as Eriki et al. (2023), Owolabi and Obida (2013), and Eriki, Iyoha, and Adetula (2022), among others, investigated unclaimed dividends with different variables. Meanwhile, more research needs to be conducted on the effect of e - dividend payments on investment performance among Nigerian deposit money banks. Thus, the research objective is to investigate the moderating effect of firm size and firm age on the effect of e - dividend payment and investment performance among Nigerian deposit money banks. The remaining paper is organized thus: Section 2 explains the literature review, section 3 illustrates the research method used for the study, Section 4 presents the research findings, and Section 8 concludes as well as explains the recommendation of the study.

2. Literature Review

2.1 Conceptual Review

E - Dividend

This method substitutes the mailing of dividend warrants for the direct credit of dividend payments to shareholders into their preferred bank accounts. It is also a service that enables an issuer to pay your cash dividend entitlements electronically into your bank account instead of using bank checks. Dividends that are credited directly to a bank account can be accessed in the quickest way possible.

Investment Performance

Investment performance is a term used to describe the return on a portfolio of investments. The investment portfolio may consist of a single asset or a group of related assets. An

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investment's performance is evaluated over a predetermined period and in a predetermined currency. Investors frequently recognize different types of returns. The overarching objective of performance measurement is to aid us in selecting investments and provide ongoing information about how our investments are performing so that, as investors and money managers, we can make informed decisions about what to do next.

2.2 Theoretical Review

In explaining the e - dividend and investment performance theoretically, three theories aligned with the research. The theories include Modigliani and Miller's dividend irrelevance theory, the dividend valuation model, and Gordon's growth model. From the three theories adopted, Gordon's growth model is the underpinning theory relevant to the research paper. Myron Gordon propounded the theory in the 1960s. The theory was based on the presumption that dividends in the future will increase steadily and forever. Due to the underlying presumption, this model can only be used with businesses with steadily increasing dividends. The study is helpful because it is associated with growth rates, discount rates, and valuation.

2.3 Empirical Review

Related studies carried out on E dividend and investment policy was conducted by Erirki, Iyoha and Adetula (2022) where the researchers studied the effect of dividend payment system and management of rising trend of unclaimed dividends in Nigeria. In the research, the pre and post difference of the e - dividend was used to investigate the significance between the e - dividend payments system using the Stochastic method. The research concluded that the implementation of electronic dividend payments had no impact on Nigeria's rising trend of unclaimed dividends. Oladele and Oyerinde (2011) worked on the adoption of e - dividend payment method using primary data. The study was also analyzed using factor analysis, independent samples t test and discriminant analysis, and thereby identified the seven issues that differentiate adopters from non - adopters.

Researchers have studied the dividend policy with variables such as earnings management, environmental, social and governance disclosure, profitability, among others. The paper of Khan (2022) conducted in Turkey used ownership structure and board characteristics on dividend policy. The study used logit, probit and tobit model to analysis the panel dataset obtained and thereby discovered that institutional and concentrated ownership positively associate with dividend payouts while family ownership insignificantly influenced dividend policy. In the same manner, Khan, Yilmaz, and Aksoy (2022) studied the board demographic diversity on the dividend payout policy using the sixty - seven (67) non - financial companies between 2013 to 2018. In the research, it was concluded that gender, tenure, and age diversity insignificantly affect dividend payments whereas family - owned companies negatively influence dividend payment intensity.

An evidence from the French context where dividend policy was used as a dependent variable and corporate social responsibility (CSR) was used as an independent variable. The study used non - financial firms in French to analysis panel data obtained from 2008 to 2018 and thereby adopt the generalized least squares method. With the use of 825 observations, the study found that CSR significantly influence the dividend policy positively. Benlemlih (2019) used 22, 839 observations for the period 1991 to 2012 found that socially irresponsible firms adjust dividend rapidly than the socially responsible firms. Cheung, Hu and Schwiebert (2018) predicted the firms with a stronger involvement in CSR activities as an association with the dividend payouts. Badru and Qasem (2021) used the context of Malaysian to interact the family - controlled companies on the CSR and dividend payments. The research finding is similar to other research findings and concluded the controlling effect of family control significantly affect the association between CSR and dividend payments using 263 Malaysian companies. Sheikh, Bhutta, Rehman, Bazil, and Hassan (2022) used a strategic choice in family firms to study the effect of CSR and dividend policy. The study of Sheikh et al (2022) used a sample of 1480 observations from Pakistan using robust regression analysis. According to the study, more CSR initiatives increase a company's propensity to pay dividends but decrease the dividend payout for firms that already do so.

Dalyop, Sunday, and Bereh (2017) used dividend policy as an independent variable. The study examines fifteen listed Nigerian Deposit Money Banks from 2010 to 2015 in terms of market price of shares, dividends paid, retained earnings, and net assets. It used the autoregressive model with econometric views (Eviews) software because it was an empirical study. According to the study's results, dividend policy significantly increases the share price of listed Nigerian deposit money banks. From the research of Bawa and Kaur (2013) carried out in Indian on the dividend policy and shareholder’s wealth discovered that long run wealth of shareholders of dividend paying IT companies has increase significantly than comparison to non - dividend paying IT companies. Olaoye and Olaniyan (2022) used consumer goods companies in the Nigeria Exchange Group to investigate the effect of dividend policy and firm performance by adopting the use of secondary data. The study discovered that dividend payout significantly relate to the return on assets and retained earnings. The study also found that dividend payout negatively affect the debts on equity.

3. Research Method

The study adopted a multiple regression analysis to examine how electronic dividend cum investment performance of the stock market among the deposit money banks in Nigeria. The research encompassed ten (10) deposit money banks using pre and post - era of the electronic dividend. The banks used include First City Monument Bank Plc, Sterling Bank, Guaranty Trust bank, First Bank of Nigeria Plc, Union Bank of Nigeria, United Bank for Africa Plc, Zenith Bank Plc, WEMA Bank Plc, Ecobank Nigeria Plc, and Stanbic IBTC Bank Plc. These banks were selected because they are listed on the Nigeria Exchange Group (NGX), and their

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standards remain among the Nigerian banks using a purposive sampling technique.

To proceed with the analysis, the pre and post - analysis were carried out on the e - dividend and investment performance of the Nigeria deposit money banks. The pre - analysis data used a dataset from 2009 to 2014, while post analysis data used a dataset from 2016 to 2021. Meanwhile, e - dividend is measured using interim dividends, while investment performance is measured using return on investment. E - dividend is the independent variable, and investment performance is the dependent variable. The control variable is firm size, measured by the log of the total assets and firm age is measured using years of established, as shown in Figure 1. The data used was adopted from the annual report of the NGX.

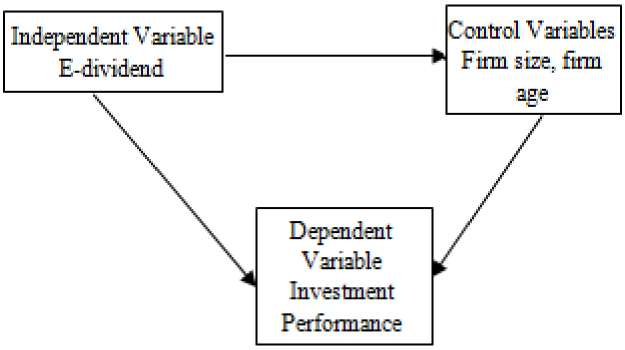

Figure 1: Conceptual Framework

The study used a correlation matrix, multicollinearity test and inferential method of data analysis. The inferential statistics used regression analysis. The regression analysis established the effect of E - dividend on Investment Performance. The study, however, formulated this hypothesis:

Source: Researcher's Conceptual Framework, 2023.

H_0: Firm size and firm age have controlling effect on the effect of E - dividend and investment performance in the Nigeria Stock Market.

The model used for the research is, however, stated as thus:

$$Y_{pre} = \beta_\circ + \beta_1(E - dividend)_1 + \beta_2(firm - size)_2 + \beta_3(firm - age)_3 + \varepsilon \ldots\ldots\ldots\ldots (1)$$

$$Y_{post} = \beta_\circ + \beta_1(E - dividend)_1 + \beta_2(firm - size)_2 + \beta_3(firm - age)_3 + \varepsilon \ldots\ldots\ldots (2)$$

Where; Y is the dependent variable (investment performance), $\beta_\circ$ is the constant of the regression analysis, $\beta_1 - {}_3$ is the coefficient value of the E - dividend, firm size and firm age, and ε is the random error or the white noise in the research study.

4. Results and Discussion

As explained earlier, the study used ten (10) deposit money banks available in the NGX, and the analysis is divided into pre and post - electronic dividends. Table 1 showed a weak positive correlation among the variable (e - dividend, firm age, and firm size). The result indicated that the independent variables are independent, which satisfied the assumption of the multiple regression analysis. Also, the correlation result shows a value < 0.75, revealing no problem of multicollinearity, as suggested in the research of Baltagi (2013). To confirm the result of the multicollinearity test, VIF, which indicated variance inflation factor shows a value less than 10 for both pre and post - test analysis. The value of the tolerance level for the pre and post - result shows a value less than 1. Therefore, e - dividend, firm size, and firm age have no multicollinearity issues.

Table1: Correlation Matrix.

	Pre - Test					Post - Test				
	E - dividend	Firm Size	Firm age	VIF	1/VIF	E - dividend	Firm Size	Firm age	VIF	1/VIF
E - dividend	1.000			2.15	0.47	1.000			2.76	0.36
Firm Size	0.323	1.000		2.86	0.35	0.121	1.000		3.12	0.32
Firm Age	0.216	0.287	1.000	3.14	0.32	0.238	0.401	1.000	3.01	0.33
Mean				2.72	0.38				2.96	0.34

Source: Researcher's Work, 2023.

The result shown in Table 2 was obtained after analysing the pre and post analysis of the research study, $Y = f(X, Z)$. The coefficient and p - value of the study are presented in Table 2. In checking the effect of electronic dividend on investment performance, the result of the pre and post - test analysis were consistent. This indicated that for pre and post - test analysis, the electronic dividend has a positive contribution to the investment performance with the coefficient value of 0.322 and 0.451 pre and post - test respectively. This showed that a unit increase in e - dividend will yield 0.322 and 0.451 increase in investment performance. Firm size has a positive contribution to the effect of investment performance with the coefficient value of 0.541 and 1.79 for pre and post - test respectively. A unit increase in firm size will yield 0.541 and 1.79 increase in investment performance for pre and post - test. In addition, fir age showed positive contribution to the investment performance with the coefficient value of 0.104 and 1.88 respectively. This means that firm will increase investment performance by 0.104 and 1.88 for pre and post - test analysis. The linear equation of the regression analysis showing the coefficient value is displayed as thus:

$$Y_{pre} = -1.065 + 0.322(E - dividend)_1 + 0.541(firm - size)_2 + 0.104(firm - age)_3 \ldots\ldots\ldots\ldots\ldots (3)$$

$$Y_{post} = 0.865 + 0.451(E - dividend)_1 + 1.79(firm - size)_2 + 1.88(firm - age)_3 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

The result further explained how the independent variable (E - dividend) and the control variables (firm size and firm age) are significant with investment performance, measured with return on investment. The result displayed for both pre and post - test analysis showed consistency. This showed that e -

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dividend significantly affected investment performance of the pre and post - test with the p - value of 0.003 and 0.000 respectively. Likewise, firm size significantly affected the investment performance with the p - value of 0.000 for each of the pre and post - test analysis. Firm age significantly affected investment performance of 0.034 and 0.000 respectively. The criteria for the significance of the study was to reject the stated hypothesis at p - value < 0.05 (5% significance level).

Meanwhile, the diagnostic test of the pre and post - test analysis using the adjusted r square analysis. For the pre - test of the e - dividend, 0.434 of the independent variables, that is 43.4% of the independent variable contribute to the dependent variable, investment performance while the remaining 56.6% of the variable is loss to the error term or factors not considered in the study. The result of the post test showed that 65.1% of the independent variable contribute to the dependent variable while the remaining 34.9% of the independent variable is loss to an error term or factors not considered in the study.

Generally, the null hypothesis which stated that “firm size and firm age have controlling effect on the effect of e - dividend and investment performance of the Nigeria stock market among the deposit money banks is rejected if p - value < 0.05 (5% significance level). Since the p - value of the pre and post - test analysis show 0.000, it means that that the null hypothesis is rejected. Thus, the study concluded that firm size and firm age have controlling effect on the effect of e - dividend and investment performance among the Nigeria deposit money banks.

Table 3: E - dividend and Investment Performance

	Pre - Test					Post Test				
	Coeff.	Std. Error	T - statistic	P - value	Decision	Coeff.	Std. Error	T - statistic	P - value	Decision
Constant	- 1.065	0.32	0.871	0.040		0.865	0.16	1.12	0.001	
EDD	0.322	0.17	1.10	0.003***	Significant	0.451	0.21	1.11	0.000***	Significant
FS	0.541	1.04	2.56	0.000***	Significant	1.79	0.54	1.56	0.000***	Significant
FA	0.104	0.32	2.31	0.034**	Significant	1.88	0.43	2.11	0.000**	Significant
Adjusted R^2	0.434					0.651				
$F_{(3, 20)}$	19.74					20.13				
P - value	0.000					0.000				

Source: Researcher’s Work, 2023.

5. Discussion of Findings

The analysis results revealed that the independent variables are independent of each other, with a correlation value of less than 0.5. The correlation value showed no multicollinearity problem, and VIF and 1/VIF confirm the result. Since there is no problem of multicollinearity and the independent variable and the control variables are independent of each other, then there is a need to proceed with the data analysis.

The effect of pre and post - test analysis of e - dividend and investment performance among the deposit money was presented in Table 2. The analysis found that post - test analysis of e - dividend and investment performance showed the best model since it has the highest adjusted r square of 65.1%. It means that the dataset for the post - test is more accurate and defines the context of the research work. Proceeding with the result, the analysis for e - dividend, firm size, and firm age positively contributed to investment performance. The result showed consistency for both pre and post - test analysis. Thus, the study concluded that firm age and size significantly affected the effect of e - dividend and investment performance of the Nigerian deposit money banks.

Following the significance, the research of Erirki et al. (2022) showed that e - dividend payment significantly affected Nigeria’s rising trend of unclaimed dividends. The research paper does not align with the research findings since the analysis showed that e - dividend significantly affected investment performance. Another study that confirmed an insignificant effect and was not appropriate within the study is the findings of Khan (2022) which indicated that family ownership insignificantly influenced dividend policy. Also, socio- demographic characteristics and age diversity insignificantly affected the dividend payments.

The study of Badru and Oase (2021) supported the research findings and concluded that family control significantly affected the association between CSR and dividend payments. Other researchers who found a significant effect include Olaoye and Olaniyan (2022), and Cheung et al. (2018) discovered a more substantial involvement with dividend payments. All these researches support the findings, which stated that firm size and firm age have a controlling effect on the effect of e - dividend and investment policy using the Nigeria deposit money banks.

6. Conclusion and Recommendations

The result exposed the Nigeria deposit money banks investment performance and electronic dividend carried out in the stock market. The study used ten (10) Nigeria banks. The dataset used for the study was dividend into two (pre and post) since the establishment of electronic dividend was July 2015. The study explains the essence of firm size and firm age on the effect of e - dividend and investment performance using the Nigeria deposit money banks. The study affirmed that all the variables (e - dividend, firm size, and firm age) positive contributed to the effect of investment performance. Based on the research findings, the result concluded that firm size and firm age significantly affected the effect of e - dividend and investment performance of the Nigeria deposit money. The study, thereby, suggested that investors should take investment information into account in order to allocate their crucial capital resources wisely,

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especially when analyzing and assessing bank's future prospects.

References

[1] Abubakar, N. (2019). Does level of information asymmetry determines dividend smoothing behaviour? Evidence from listed goods firms in Nigeria. *Journal of Management Science and Entrepreneurship*, *17* (7), 14 - 27.

[2] Badru, B. O., &Qasem, A. (2021). Corporate social responsibility and dividend payments in the Malaysian capital market: The interacting effect of family - controlled companies. *Journal of Sustainable Finance & Investment*, 1 - 24.

[3] Bawa, S. K., & Kaur, P. (2013). Impact of dividend policy on shareholder's wealth: an empirical analysis of Indian Information Technology Sector. *Asia - Pacific Finance and Accounting Review*, *1* (3), 17.

[4] Benlemlih, M. (2019). Corporate social responsibility and dividend policy. *Research in International Business and Finance*, *47*, 114 - 138.

[5] Ben Salah, O., & Ben Amar, A. (2022). Does corporate social responsibility affect dividend policy? Empirical evidence in the French context. *Journal of Global Responsibility*, *13* (3), 268 - 289.

[6] Cheung, A., Hu, M., &Schwiebert, J. (2018). Corporate social responsibility and dividend policy. *Accounting & Finance*, *58* (3), 787 - 816.

[7] Dalyop, L. M., Sunday, R. U., &Bereh, M. N. (2017). The impact of dividend policy on share prices of listed commercial banks in Nigeria. *Tax Academy Research Journal*, *1* (1), 115 - 124.

[8] Eriki, E., Iyoha, F. O., &Adetula, D. (2022). Effect of E - dividend payment system and management of rising trend of unclaimed dividends in Nigeria. *Journal of Internet Banking and Commerce*, *27* (7), 1 - 10.

[9] Eriki, E., Iyoha, F. O., &Adetula, D. (2023). Incidence of unclaimed dividends: A panel data analysis of the role of quoted companies in Nigeria. *WSEAS Transactions on Business and Economics*, *20*, 80 - 91.

[10] Khan, A., Yilmaz, M. K., & Aksoy, M. (2022). Does board demographic diversity affect the dividend payout policy in Turkey?. *EuroMed Journal of Business*, (ahead - of - print). https: //doi. org/10.1108/EMJB - 01 - 2022 - 0019

[11] Khan, A. (2022). Ownership structure, board characteristics and dividend policy: evidence from Turkey. *Corporate Governance: The International Journal of Business in Society*, *22* (2), 340 - 363.

[12] Kighir, A. E., Salisu, M., & Samuel, J. (2018). Corporate earnings and dividends smoothing in Nigeria: A red flag for unclaimed dividends. *Bayejo Journal of Management Sciences*, *1* (2), 123 – 136.

[13] Okpaleke, F. C., Emele, C. R., & Gambo, Y. L. (2014). Unclaimed dividend: a latent alternative source for housing finance in Nigeria. *ATBU Journal of Environmental Technology*, *7* (1), 10 - 21.

[14] Oladele, O., &Oyerinde, A. (2011). An assessment of factors influencing the adoption of E - dividend payment method for efficient customer services delivery by Nigerian banks. *Journal of Emerging Trends in Economics and Management Sciences*, *2* (5), 379 - 387.

[15] Olaoye, C. O., & Olaniyan, N. O. (2022). Dividend policy and firm performance of listed consumer goods companies in Nigeria Exchange Group. *Acta Universitatis Danubius. Œconomica*, *18* (3).

[16] Otieno, A. P., &Oloo, M. S. (2013). The determinants of dividend smoothing among Listed Companies at the Nairobi Securities Exchange. *International Journal of Science and Research (IJSR)*, *4* (2), 1851 - 1861.

[17] Owolabi, S. A., &Obida, S. S. (2013). Unclaimed dividend: matters arising. *Singaporean Journal of Business Economics and Management Studies*, *1* (6), 30 - 47.

[18] Sheikh, M. F., Bhutta, A. I., Rehman, B., Bazil, M., & Hassan, A. (2022). Corporate social responsibility and dividend policy: a strategic choice in family firms. *Journal of Family Business Management*, *12* (2), 296 - 315.

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