The Moderating Effect of Forex Volatility on Dividend Policy and Financial Performance: Empirical Evidence from Nigeria

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Abstract

The study investigated the joint effect of dividend policy and foreign exchange volatility on the financial performance of listed industrial goods firms in Nigeria. The study was anchored on the signaling theory and adopted a panel research design. Population of the study was made up of all 13 industrial goods firms listed on the Nigeria Exchange Group (NGX) as at 31st December 2023. Findings of the study showed that dividend payout ratio significantly reduces financial performance measured as return on equity while forex volatility was found to negatively influence financial performance. The joint effect of dividend payout ratio and forex volatility was negative indicating that fluctuations in foreign exchange rates exacerbate the negative effect of dividend payout ratio on financial performance. Ensuing from our findings, we recommend that industrial goods firms should create a balanced dividend plan between paying out dividends to shareholders and keeping enough money to reinvest in the company.

Key Words: Dividend Policy, Payout Ratio, Retained Profit, Forex Volatility, Return on Equity. JEL: E32, F31, L25

Introduction

A corporation can choose how to distribute its profits to shareholders by implementing a set of guidelines known as a dividend policy. Dividend decision is an important financial choice that impacts several parties, such as creditors, shareholders, and management. Determining how much of earnings should be kept for growth and reinvestment vs how much should be distributed as dividends to shareholders is the decision made regarding the dividend policy.

According to the signalling theory, a company's dividend payments can tell the market about its profitability and future prospects, which can affect investor perceptions and stock prices (Bello et al., 2022; Manikas et al., 2022). By lowering the cash flow available for managerial discretion and potential misuse, dividend payments, in accordance with the agency theory, might minimise agency disputes between shareholders and managers and align their interests (Khan et al., 2021). The trade-off theory proposes that firms balance the benefits of dividend payments, such as reducing agency costs and signaling financial strength, against the costs of external financing and potential underinvestment. According to the life cycle idea, businesses at various periods of their existence have varying dividend policies based on their growth opportunities and cash flow needs, with mature firms tending to distribute higher dividends (DeAngelo et al., 2006; Thanatawee, 2014).

The concept of financial performance pertains to an organization's ability to generate revenue, manage expenses, and effectively use its assets to attain profitability, add value for stakeholders, and guarantee sustained viability (Mardones & Cuneo, 2021; Omoregie & Erah, 2022). It is a multifaceted idea that includes profitability, liquidity, solvency, efficiency, and market performance, among other elements of a company's financial health. In order to satisfy the demands of stakeholders such as creditors and shareholders and to keep a competitive edge in the market, businesses endeavour to attain optimal financial performance.

The term "forex volatility" describes the swings or variances in the exchange rates between different currencies over a specific time frame. It is a gauge of the risk and unpredictability connected to foreign exchange markets, and it can have a big impact on businesses who trade internationally, make overseas investments, or handle multi-currency operations. Numerous factors, such as monetary policies, political developments, economic conditions, and market speculation, can contribute to forex volatility (Ahmed & Sanusi, 2021; Alshammari et al., 2022; Okoye et al., 2022). For businesses, high currency volatility can make it difficult to estimate future financial performance, manage cash flows, and hedge currency risks.

Numerous studies have been conducted in the literature on the relationship between dividend policy and corporate financial performance, with varying degrees of findings. According to some research, paying dividends can improve a company's financial performance by lowering agency costs, demonstrating its stability to investors, and boosting investor trust (Al-Najjar & Kilincarslan, 2018; Aruna & Nagaraju, 2018; Khan et al., 2021). Nevertheless, some research indicates that dividend disbursements may have an adverse impact on the company's financial performance by diminishing its retained earnings and limiting its capacity to finance investments and expansion prospects (Alzahrani & Lasfer, 2018; Hamid et al., 2015; Tahir & Raja, 2016).

In the context of Nigeria, forex volatility has been a persistent issue due to the country's reliance on oil exports and the fluctuations in global oil prices, as well as the central bank's interventions in the foreign exchange market (Okorie et al., 2020; Ahmed & Sanusi, 2021; Okoye et al., 2022). Nigerian firms, particularly those in the industrial sector, are exposed to forex volatility due to their import and export activities, foreign currency-denominated transactions, and international business operations. In recent times, foreign exchange (forex) volatility poses significant challenges for industrial firms in Nigeria, particularly those listed on the Nigerian Exchange Group (NGX). Recent reports indicate that major Nigerian companies have collectively incurred substantial forex losses amounting to N716.8 billion in the second-quarter earnings season of 2023 due to the devaluation of the naira against the US dollar (Okoye, 2022). These losses have had a profound impact on the companies' retained earnings, financial performance, and overall profitability.

With varying degrees of success, empirical research has looked at how forex volatility affects stock market returns, investment choices, profitability, and other areas of business performance (Ahmed & Sanusi, 2021; Alshammari et al., 2022; Okorie et al., 2020; Okoye et al., 2022). The relationship between dividend policy and financial performance has also been extensively studied, but the literature has paid little consideration to the potential moderating effect of FX volatility on the association between dividend policy decisions and firm performance. But as research on this topic has recently progressed, it not clear whether foreign exchange fluctuations can have a big influence on corporate dividend decisions and financial performance, especially for companies that trade and operate internationally. This gap is the primary motivation for this study.

The remainder of the paper is organised as follows: Section two focuses on the literature review and hypotheses development. Section three addresses the methodology with emphasis on theoretical framework and model specification. Section four presents the estimation result and discussion of findings. Section five concludes.

Literature Review

Financial Performance

Financial performance can be defined as the process of assigning a monetary value to a company's strategies, policies, and actions. It is a valuation that can be explained by the company's return on investment and return on assets. Naz et al. (2023) asserts that indicators of financial performance include operating revenue, operating income, cash flow from operations, and total unit sales. In a similar vein, an investor or analyst can decide to look more closely at the financial records to examine margin growth rates or any reduction in debt.

According to Ngwoke (2021), a company's liquidity, solvency, profitability, and market success are all included in its financial performance. Liquidity measures, such as the quick and current ratios, evaluate a company's capacity to pay short-term debt and sustain a positive cash flow. Solvency ratios, such as the debt-to-equity ratio and interest coverage ratio, evaluate a business to fulfill its long-term financial responsibilities and sustain operations over an extended period. A company's ability to turn a profit and add value for shareholders is reflected in its profitability,

which is frequently seen as the most important component of financial performance (Ifejiagwa et al., 2020). Return on equity (ROE), return on assets (ROA), and net profit margin are examples of profitability ratios that are frequently used to assess a company's profitability and operational effectiveness. According to Pontoh (2017), market performance metrics like market capitalization, the price-to-earnings (P/E) ratio, and earnings per share (EPS) provide important information about the market value of a firm and its potential to generate returns for shareholders.

Dividend Policy

The term "dividend" has been defined in a variety of ways. A dividend is a payment paid by a business to its shareholders, typically as a division of earnings, according to Corporate Finance Institute (2023). Sharma and Singh (2019) defined a dividend as a cash or non-cash payment made by a company to its shareholders, typically paid out of the company's current or retained earnings. Otuya et al. (2023) stated that a dividend is a distribution of a portion of a company's earnings to its shareholders, as determined by the board of directors.

A dividend policy, according to Das (2020), is a set of guidelines that a company adheres to when deciding how much of its revenues to give shareholders in the form of dividends. A dividend policy, according to Foong and Abd Malek (2022), is a business's strategy for determining the quantity and timing of cash payouts to shareholders from the company's profits. The framework or set of guidelines that a business employs to determine how much of its profits should be distributed to shareholders as dividends and how much should be reinvested by the business is known as its dividend policy (Olayinka et al., 2017). A company's approach to determining how much of its profits to keep for internal reinvestment and how much to distribute as dividends to shareholders is known as its dividend policy (Bello et al., 2022).

Foreign Exchange Volatility

Foreign exchange volatility or forex volatility refers to instability or fluctuations in the exchange rate of one country to another country's currency. The fluctuations in exchange rates have universal consequences, leading to an increase in commodity prices, wages, and interest rates (Abina & Mogbeyiteren, 2021). These movements have a relative impact on the competitive position of both domestic firms and foreign competitors. Aside from interest rates and inflation, the currency rate also plays a crucial role in determining economic strength of developing economies. One reason for this is the influence it has on other income determinants, such as interest rates, inflation, and capital gains from domestic securities (Nwachukwu et al., 2016). Additionally, it diminishes the purchasing power of income.

Several factors contribute to the extreme volatility and devaluation of Nigeria's local currencies against major currencies. One such factor is Nigeria's heavy reliance on oil exports, which are valued in US dollars and thus subject to fluctuations in the world oil price. Investor confidence and international capital inflows can be impacted by political instability and policy concerns. Furthermore, it reduces income's purchasing power (Kelilume, 2016).

Dividend Policy, Forex Volatility, and Financial Performance

The interrelationship between dividend policy, and firm financial performance becomes evident when considering the impact of exchange rate fluctuations on a company's profitability and cash flows, which in turn influence its ability to maintain or adjust dividend payments. Companies with significant foreign currency exposures may need to adopt a more conservative dividend policy or adjust their dividend payments in response to adverse exchange rate movements. This can lead to potential conflicts between maintaining stable dividends and preserving financial flexibility. Conversely, companies with effective forex risk management strategies and stable cash flows may be better positioned to maintain consistent dividend payments, potentially enhancing their attractiveness to income-oriented investors.

The relationship between financial performance and dividend policy has been the subject of numerous research, although the findings have been mixed. For example, when Naz et al. (2023) looked at the connection between dividend policy and business success, they discovered that dividend policy significantly improves firm performance. Comparably, Otuya et al. (2023) examined the variables that can affect the choice to pay dividends and the firm's value and discovered that dividend distribution significantly increased firm value. The impact of dividend policy on the performance of Bursa Malaysian enterprises from 2012 to 2021 was evaluated by Jamaludin and Sufar (2023). The results demonstrate that DPR significantly improves ROA. But according to a study by Nguyen et al. (2021) that looked at how dividend policies affected a company's financial performance on the Vietnamese stock market between 2008 and 2019, choosing to pay dividends has a negative effect on Vietnamese firms' performance as determined by accounting-based metrics. According to the findings of Das (2020) and Musa et al. (2020), DPR has little bearing on ROE.

There are conflicting results in the research currently in publication regarding how foreign exchange volatility affects financial performance. For example, Lee (2017) demonstrated that a firm's performance level may not always be impacted by fluctuations in foreign currency. Kelilume (2016) also discovered that in an economy with more exchange rate volatility, firms operating within it will be less efficient, which will consequently lead to lower company performance. However, a study by Asian (2021) indicated that more volatility exchange rates are linked to significantly worse stock returns using the generalised method of moments (GMM) models on dynamic panel data. Additionally, Okika et al. (2018), and Zheng (2023) discovered that when the intermediary capital ratio is low and the foreign exchange implied volatility is high, there is a significant price impact of dividend flows on forex around the payment date.

Control Variable: Firm Growth

Firm growth is a crucial factor that can influence how well a company performs. It can be measured in a number of ways, such as staff size, assets, turnover, and profitability. Growth has a positive and significant impact on the financial performance of food and beverage enterprises in Nigeria, according to a study by Okechukwu (2021), but Yadav et al. (2021) found evidence of a negative size-profitability relationship in a study of Asian Pacific markets. According to Musa (2020), the expansion of the insurance company had little bearing on profitability.

3. Methodology

Design, Sampling and Data

The study adopted the panel data research design since it utilized the combination of cross-sectional and longitudinal data. The study's population consists of all 13 publicly listed industrial goods companies in Nigeria as at 31 December 2023. Due to the small size of the population, a census sample of the 13 industrial goods firms was used, giving a data set of 143 firm year-observations from 2013 to 2023 for the study. Given the nature of this research work, various statistical methods were employed to analyze the data. Preliminary analyses were conducted using the descriptive and correlation and VIF tests. Before proceeding with the regression analysis, a series of residual diagnostics tests were conducted to ensure the validity of the regression assumptions. The null forms of the hypotheses were rejected where the probability values exceed the benchmark of P=0.05

Theoretical Framework and Model Specification

This research is anchored on the signalling theory. Based on information gaps that were noted between firm owners and managers, Michael Spence first proposed the signalling theory in 1973. The concept of "signalling" refers to the process by which one entity (the agent) credibly communicates information about itself to another entity (the principal) (Lewis, 2011). The premise that a company's management is more informed than its shareholders about its future financial prospects is the basis of the signalling dividend concept.

According to this theory, the market will interpret a company's announcement of a larger payout than expected as a sign that future financial prospects would be better than projected. Investors feel that management would not have raised the dividend if it did not think it could be sustained over the long term. According to the hypothesis, a company's dividend payments inform investors about its potential for future financial success and profitability. A theoretical foundation for comprehending how dividend policy choices may affect investors' perceptions and expectations—which can then have an effect on a firm's financial performance—is provided by the signalling theory.

However, the moderating role of forex volatility explored in this study can be aligned with the signaling theory. In a forex volatile environment, dividend policy decisions may become even more crucial as signals to investors, as they provide insights into a firm's ability to navigate currency fluctuations and maintain stable cash flows and profitability. The study can further explore the potential interaction between dividend policy signals and forex volatility. Against this backdrop, the conceptual model for the study is described as follows:

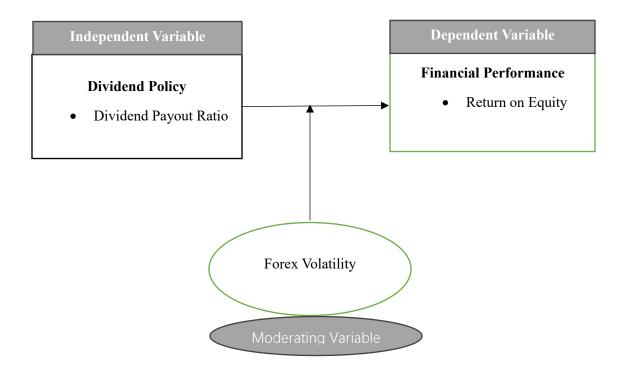


Figure 1: Conceptual model for the study

Against the backdrop of the above framework, we express a functional relationship as:

$$FFP = f(DPR, FXV)$$
 -----(i)

Integrating the control variable of firm growth that may cause variation in the dependent variable of firm financial performance, equation (i) is modified as:

$$FFP = f(DPR, FXV, GRT)$$
 -----(ii)

Expressing equation (ii) in econometric form and considering the panel nature of the regression data, equation (iii) is transformed as:

$$FFP_{it} = \beta_0 + \beta_1 DPR_{it} + \beta_2 FXV_{it} + \beta_3 GRT_{it} + \mu_{it}$$
 ----- (iii)

Considering the mediating effect of foreign exchange volatility on the relationship between dividend policy and firm financial performance which is the fundamental objective of this study, we modified equation (iii) to reflect the interaction of the variable of dividend policy and forex volatility as:

$$FFP_{it} = \beta_0 + \beta_1 DPR_{it} + \beta_2 FXV_{it} + \beta_3 DPR*FXV_{it} + \beta_4 GRT_{it} + \mu_{it}$$
 (iv)

3.4 Measurement of Variables

Table 1: Operationalisation of Variables

Variables	Code	Measurement	Source	
		Dependent variable		
Firm Financial	FFP	Net Income	Jamaludin and Sufar (2023)	
Performance		Total Shareholders Equity		
		Independent Variable		
Dividend Payout	DPR	Dividend Per Share(DPS)	Otuya et al. (2023)	
Ratio		Earning Per Share (EPS)		
		Moderating Variable		
Forex Volatility	FXV	Change in Operating Profit	Lee (2017), Kelilume (2016)	
		Change in Exchange Rate		
		Control Variable		
Firm Growth	GRT	Assets of Current Year – Assets of Prev	Naz et al. (2023)	
		Assets of Previous Year		

Source: Researcher's Compilation (2024)

4. Presentation of Results and Discussion

Preliminary Analyses

Table 2: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
FFP	135	4.277677	10.15141	-14.9087	45.81128
DPR	135	-0.08843	0.242461	-1.35708	0.015873
FXV	135	0.84972	1.197277	-2.25806	3.990052
GRT	135	0.197687	1.17159	-1	13.10812

Source: Own elaboration based on data analysis

Table 2 presents the descriptive analysis of the data with respect to the study variables. As observed, the total observation was 135 instead of 143 due to missing data from publicly available sources adopted. According to the data, the average profitability in terms of equity is 4.28%, with a mean of 4.277677 for financial performance (return on equity) suggesting a modest rate of return on investors' capital in these companies. The high standard deviation of 10.15141, however, shows that there is a considerable range in FFP among industrial goods companies, with some operating extraordinarily well and others finding it difficult to provide returns for their investors. The range of values, from minimum -14.9087 to maximum 45.81128, indicates the presence of industrial

goods companies that have experienced significant losses (negative return on equity) and companies that have achieved exceptionally high levels of profitability. These variations may be attributed to various factors, including operational efficiency, market conditions, or competitive advantages.

Furthermore, the average dividend payout ratio (DPR) of the sample's industrial goods companies was -0.08843, meaning that they either did not pay dividends or had negative payout ratios, possibly holding onto the majority of their earnings for reinvestment or to offset losses. The industrial goods industry's payout ratios vary moderately, as indicated by the standard deviation of 0.242461, with certain firms exhibiting larger payout ratios than others. The existence of industrial goods firms with significantly negative payout ratios (maybe as a result of losses or a strong emphasis on reinvestment) and enterprises with low but positive payout ratios is highlighted by the minimum value of -1.35708 and the maximum value of 0.015873.

Conversely, the typical swings in exchange rates that businesses experience are represented by the forex volatility (FXV), which has a mean of 0.84972. The large standard deviation of 1.197277 above the mean indicates that there is a considerable variance in the exposure to forex volatility among industrial goods companies, with certain companies being more affected by currency changes than others. The range of exchange rate fluctuations experienced by the sample firms is represented by the minimum value of -2.25806 and the maximum value of 3.990052.

The descriptive statistics also shows that the sampled firms recorded an average of 19.7 percent with a maximum and minimum growth rate of 13.1 and -1 per cent indicating that some of the sampled industrial goods firms recorded reasonable positive growth while other had a negative growth. The standard deviation of 1.171 suggests non - significant variation in company growth rate across industrial goods firms.

Table 3: Correlation Matrix to address Multicollinearity Problem

	DPR	FXV	GRT
DPR	1		
FXV	0.1578	1	
GRT	0.0179	0.0963	1
VIF	1.44	1.76	1.1
Tolerance	0.694165	0.569381	0.913196

Source: Own elaboration based on data analysis

The VIF and Tolerance value in Table 3 indicates that collinearity problem does not exist as no VIF is higher than 10 in the model while the tolerance of all the variables is higher than 0.2.

Diagnostics Checks

Some diagnostic tests were conducted before carrying out the regression analysis. The results of the tests are described below:

Table 4: Model Diagnostics Tests

Test	Results
Hausman	$X^2 = 6.57 (p > 0.05)$
BPLM	Chibar ² = $74.08 \text{ (p} < 0.01)$
Heteroscedasticity	$X^2 = 5.28 (p > 0.05)$
Serial Correlation	F = 2.369 (p < 0.05)

Source: Own elaboration based on data analysis

The Hausman test statistics ($X^2 = 6.57$) are negligible with p > 0.05, suggesting that the random effects estimator is adequate. The BPLM test is used to determine the appropriateness of random effect for the estimation of the stated model. The BPLM test statistics (Chibar² = 74.08 is significant (p = 0.001), indicated the appropriateness of random effects for the model estimation. Also, The heteroscedasticity test statistics ($X^2 = 5.28$; p = 0.11) for the models indicated the absence of heteroscedasticity. The regression residuals' serial correlation was examined using the serial correlation test. The models in Table 4 exhibit a significant result for the serial correlation test statistics (F-statistics) of 2.369 with a p value of 0.001 (p < 0.05), suggesting the presence of serial correlation. The panel corrected standard effect (PCSE) was therefore used to estimate the regression due to the existence of serial correlation.

Regression Analysis

Table 5 displays the result of estimated coefficients, z-statistic, probability, coefficient of determination of the research model.

Table 5: Overall result for the Research Model-

	Coef.	Std. Err.	Z	P> z	[95% Conf	. Interval]
DPR	-12.07845	3.502924	-3.45	0.001	-18.94406	-5.212848
FXV	2517122	.6071117	0.41	0.678	9382049	1.441629
DPR*FXV	-2.772658	2.842192	-0.98	0.329	-8.343252	2.797937
GRT	.1084143	.4951984	0.22	0.027	-8621567	1.078985
_CONS	-4.610019	5.903885	-0.78	0.435	-16.18142	6.961383

Source: Own elaboration based on data analysis

The model for the study was estimated using PCSE because of the presence of Auto correlation or serial correlation (F=2.369 (p<0.05)). The model indicated an R^2 of 22.38% which indicates that the explanatory variables can only account for 22.38% variation in the outcome variable. For an evaluation of the effects of the explanatory variables on firm financial performance, we examine their slope coefficients as discussed below:

First, at the 5% level of significance, the regression estimate of the dividend payout ratio's impact on a company's financial performance is negative and statistically significant ($\beta_1DPR_{it} = -$

12.078, p = 0.000<0.05). According to the negative coefficient, a company's capacity to reinvest retained earnings may be hampered by excessive dividend payments, which could have a negative impact on financial performance. This result is in line with research by Ifejiagwa et al. (2020), Bossman et al. (2022), Jamaludin and Sufar (2023), and Akinleye and Ademiloye (2018). This implies that a company's performance declines with increasing dividend payments.

This study, however, defies the conclusions of Ugwu et al. (2020) and Otuya et al. (2023), who discovered a substantial and positive correlation between the dividend payout ratio and return on equity (ROE), a measure of financial performance.

Second, although not statistically significant, the regression estimates show a negative link ($\beta_2 FXV_{it} = -0.2517$, p=0.678, P>0.05) between forex volatility and financial performance. The detrimental effects of currency volatility on ROE imply that changes in exchange rates have the potential to impair revenue, raise expenses, and disrupt operations, all of which have an influence on profitability indicators. This result is in line with earlier research by Asian (2021) and Zheng (2023), which concluded that currency fluctuations have some effect on a company's ability to make money.

Third, the mediating effect of forex volatility on the link between dividend policy and firm financial performance revealed a negative coefficient but not statistically significant ($\beta_3 DPR*FXV_{it}$ =-2.772, p=0.329, P>0.05). The negative coefficient suggests that increase in forex fluctuation worsens the negative link between dividend payout ratio and corporate financial performance. Additionally, the result of the control variable of firm growth is positive and significant suggesting that the level of growth substantially increases the return on equity of the selected companies.

5. Conclusion

The study examined the combined impact of foreign exchange volatility and dividend policy on the financial performance of Nigerian listed industrial goods companies. Results of the study demonstrated that while currency volatility can cause operational disruptions, raise expenses, and negatively impact revenue, ultimately impacting financial performance, dividend payout ratio dramatically lowers financial performance as evaluated by return on equity. The combined effect of forex volatility and dividend payout ratio was negative, suggesting that variations in exchange rates worsen the detrimental impact of dividend payout ratio on financial performance. Based on our research, we advise industrial goods companies operating in Nigeria to design a dividend plan that strikes a balance between giving shareholders their financial returns and retaining a sufficient amount for internal growth.

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References

- Abina, A. P. (2023). Nigeria foreign exchange experience: Challenges, prospects and options for optimal performance. *International Journal of Business & Law Research*, 11(1), 97-105.
- Ahmed, M. N., & Sanusi, B. O. (2021). The impact of corporate governance on firm performance in Nigeria: A panel data analysis. *International Journal of Corporate Governance*, 12(2), 126-143.
- Akinleye, G. T., & Ademiloye, D. S. (2018). Dividend policy and performance of quoted manufacturing firms in Nigeria. *International Journal of Scientific & Engineering Research*, 9(7). http://www.ijser.org
- Al-Najjar, B., & Kilincarslan, E. (2018). What do we know about the dividend puzzle? A literature survey. *International Journal of Managerial Finance*, 14(4), 379-417.
- Al-Malkawi, H. N., Rafiqul Bhuian, S., & Jerati, H. M. (2018). Financial leverage, dividend policy and the financial performance of Shariah-compliant firms: Evidence from Saudi Arabia. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(4), 536-551.
- Alshammari, T. S., Alhabshi, S. M., & Saili, A. R. (2022). The impact of exchange rate volatility on dividend policy: Evidence from an emerging market. *Journal of Risk and Financial Management*, 15(2), 65.
- Aruna, S. P., & Nagaraju, D. (2018). A study on dividend policy and the profitability of automobile industry in India. *IOSR Journal of Business and Management*, 20(9), 26-34.
- Alzahrani, M., & Lasfer, M. (2018). The determinants of dividend policy: An empirical examination of simultaneous relationship between dividend policy and financial architecture. *Managerial Finance*, 44(12), 1441-1459.
- Aslan, M. (2021). Effects of exchange rate volatility and firm-specific features on the rates of returns of the manufacturing firms listed in Borsa Istanbul: a CAPM approach [M.S. Master of Science]. Middle East Technical University.
- Bello, A., Sanusi, B. O., & Suleiman, A. B. (2022). Dividend policy and firm performance: Evidence from Nigeria. *Ilorin Journal of Economic Policy*, 9(2), 1-17.
- Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial management: Theory and practice* (15th ed.). Cengage Learning.
- Bossman, A., Agyei, S. K., Asiamah, O., Agyei, E. A., Arhin, E. Y., & Marfo-Yiadom, E. (2022). Dividend policy and performance of listed firms on Ghana stock exchange. *Cogent Economics and Finance*, 10(1), 1-28.
- Corporate Finance Institute (2023). Corporate Finance. Available online https://corporatefinanceinstitute.com/
- Das, P. K. (2020). Impact of dividend policy on financial performance A study. *Australian Finance & Banking Review*, 4(1), 37–47.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics*, 81(2), 227-254.

- Delen, D., Kuzey, C., & Uyar, A. (2013). Measuring firm performance using financial ratios: A decision tree approach. *Expert Systems with Applications*, 40(10), 3970-3983.
- Foong, J. K., & Abd Malek, N. I. (2022). The impact of dividend policy on firm performance in public listed company in Malaysia. *International Journal of Academic Research in Business* and Social Sciences, 12(1), 640 660.
- Hamid, K., Anwar, S., & Khan, M. A. (2015). Determinants of dividend payout: An empirical study of banking sector of Pakistan. *American Journal of Economics, Finance and Management*, 1(4), 238-247.
- Ifejiagwa, C. I., Ugwuanyi, G. O., & Onwuamanam, I. C. (2020). Impact of dividend policy on the financial performance of quoted companies in the Nigerian consumer goods sector. *International Journal of Innovative Finance and Economics Research*, 8(2), 188-199.
- Jamaludin, J., Singh, B., & Sufar, S. B. (2023). Effect of dividends policy on firm size, leverage, and performance. In *Proceedings of the 8th International Case Study Conference* (pp. 1-15). Ibis Melaka Hotel, Bandar Melaka, Malaysia.
- Kelilume, I. (2016). Exchange rate volatility and firm performance in Nigeria: A dynamic panel regression approach. *The Journal of Developing Areas*, 50(6), 161–174. https://www.jstor.org/stable/26415659\
- Lee, M. (2017). The impact of exchange rate on firm performance. Evidence from Korean firms.

 **Emerging Markets Finance and Trade*, 53(11), 2440-2449.

 https://doi.org/10.1080/1540496X.2017.1322504
- Lewis, G. (2011). Asymmetric information, adverse selection and online disclosure: The case of eBay Motors. *American Economic Review*, 101(4), 1535–1546.
- Mardones, C., & Cuneo, G. (2021). Dividends and firm performance: Evidence from Chile. *Journal of Economics and Business*, 113, 105954.
- Manikas, A., Wahyuningtyas, D., & Mathi, K. (2022). Dividend payout policy and firm performance: Evidence from Indonesia. *Journal of Governance & Regulation*, 11(1), 67-81.
- Musa, A. L. (2020). The Effect of Firm's Age, Size and Growth on Its Profitability: Evidence from Jordan. *European Journal of Business and Management*. 12(5), 88-99.
- Naz, F., Abrish, S., & Sadiq, N. (2023). Dividend policy and firm performance with moderating effect of ownership structure: Evidence from the manufacturing firms in Pakistan. International *Journal of Management Research and Emerging Sciences*, 13(2), 41-58
- Nguyen, A. H., Pham, C. D., Doan, N. T., Ta, T. T., Nguyen, H. T., & Truong, T. Van. (2021). The effect of dividend payment on firm's financial performance: An empirical study of Vietnam. *Journal of Risk and Financial Management*, 14(8).
- Ngwoke, O. M. (2021). Effect of dividend policy on financial performance of manufacturing firms in Nigeria. *International Journal of Advanced Research in Management and Social Sciences*, 10(9), 38–52.
- Nwachukwu, N. E., Adebayo, R. O., & Shettima, A. M. (2016). Real effective exchange rate misalignment in Nigeria. *CBN Journal of Applied Statistics*, 7(1), 71-91.
- Okechukwu Theresa Ijeoma (2021), An empirical analysis of firm growth and financial performance of selected firms in Nigeria. *African Journal of Accounting and Financial Research* 4(3), 150-161. DOI: 10.52589/AJAFR-ZLFUQZC

- Okika, C., E. M., Francis, N. P., & Greg, O. O. (2018). Effect of exchange rate fluctuation on firm profitability: Evidence from selected quoted conglomerates in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 8(12), 1073–1090.
- Okorie, D. I., Akhidime, A. E., Ohaka, J., & Kanu, S. I. (2020). Infrastructural challenges and manufacturing productivity in Nigeria. *Journal of Economics and Management*, 42(4), 201-234.
- Okoye, L. U., Evbayiro-Osagie, E. I., Hassan, O. M., & Okoi, I. P. (2022). Foreign exchange risk exposure and firm performance in Nigeria. *Journal of Risk and Financial Management*, 15(5), 217.
- Olayinka, I. M., Ozurumba, B. A., & Obigbemi, I. F. (2017). Impact of dividend policy on the financial performance of listed manufacturing companies in Nigeria. *Journal of Finance and Accounting*, 5(6), 185-192.
- Omoregie, O. K., & Erah, D. O. (2022). Corporate governance and financial performance of listed manufacturing firms in Nigeria. *Journal of Accounting and Taxation*, 14(1), 1-14.
- Otuya, S., Ofeimun, G., Ogwu, R., & Edike, S. (2023). Dividend decisions and market value of firms in Nigeria. *Journal of Accounting and Financial Management*, 9(9), 168-179
- Pontoh, W. (2017). The impact of financial performance toward dividend policy: Evidence from Indonesia. *Jurnal Akuntansi Dan Keuangan*, 19(2), 97-103.
- Khan, M., Hoshi, S. M., Zaman, S. I., & Rasheed, A. (2021). Effects of dividend policy on financial performance: Moderating role of cash flow level. *Journal of Applied Economics*, 24(1), 206-228.
- Sharma, V., & Singh, S. (2019). Dividend policy and firm performance: Evidence from Indian manufacturing firms. *International Journal of Productivity and Performance Management*, 68(8), 1455-1472.
- Tahir, S. H., & Raja, N. M. M. (2016). Impact of dividend policy on firms' financial performance. *Journal of Management and Sustainability*, 6(4), 77-89.
- Thanatawee, Y. (2014). Why do firms hold cash? Evidence from Thailand. *Journal of Applied Business Research*, 30(3), 667-676.
- Ting, I. W. K., Kweh, Q. L., Somah, A. A., Hamid, N. A., & Mohamed, N. (2017). Dividend policy and financial performance: Evidence from Malaysian-listed firms. *International Journal of Accounting and Financial Reporting*, 7(2), 187-201.
- Ugwu, C. C., Onyeka, V. N., & Okwa, I. E. (2020). Dividend policy and corporate financial performance: Evidence from selected listed consumer goods firms in Nigeria. *Journal of Economics and Business*, 3(3), 1055-1065
- Yadav, I.S., Pahi, D., & Gangakhedkar, R. (2022). The nexus between firm size, growth and profitability: New panel data evidence from Asia–Pacific markets. *European Journal of Management and Business Economics*, 31(1), 115 140. https://doi.org/10.1108/EJMBE-03-2021-0077
- Zheng, J. (2023). Dividend flows and the foreign exchange rate. Job Market Paper,, 1(2) 1-66