



Dividend Policy Dynamics and Shareholders' Value: Evidence from Listed Firms in The Nigerian Oil and Gas Industry

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Abstract:

This study highlighted the impact of dividend policy on the value of shareholders of firms in the Nigerian oil and gas industry in Nigeria between 2010 and 2025. The study focused on six oil and gas firms listed on the floor of the Nigerian Exchange Group (NGX). It employed share price of the listed stocks as its dependent variable while dividend payout ratio (DPR), earnings per share (EPS), and price-earnings ratio (PER) as its independent variables. The study is built on the competing theoretical frameworks of dividend relevance as propounded by Gordon (1963) as well as the dividend irrelevance theory proposed by Miller and Modigliani (1961). Diagnostics testing involving Breusch-Pagan Lagrange Multiplier and Hausman specification tests, a two-way random effect panel regression was estimated. The result confirmed that dividend payout ratio had negative and statistically insignificant influence on share prices, supporting the dividend irrelevance claims. Earnings per share, however, had positive and significant impact on share prices and this supports the Gordon's dividend relevance theory in the Nigerian oil and gas industry. Furthermore, it was confirmed that price-earnings ratio had a positive but insignificant influence on the oil and gas share prices. Moreover, the study recommended that oil and gas firms recalibrate dividend strategies towards a sustained earnings growth and value-enhancing reinvestment. This is achieved through the provision of a clear investor communication support on capital allocation priorities.

Keywords: Dividend policy, dividend payout ratio, earnings per share, price-earnings ratio, shareholders' value, Nigerian oil and gas

1. Introduction

The nexus between corporate dividend policy and the value of a firm stands at the centre stage of most contested debates in finance. Fundamentally, the most asked question remains: to what extent does a firm's earnings distribution policy influence its market valuation? However, despite decades of empirical and theoretical investigations from developed and developing economies alike, there has been no consensus on the significance of earnings distribution and its quality on the value of the firm (Bansal, 2024). According to Ogunsola et al. (2025), the Nigerian oil and gas sector is characterized by high level of capital intensity, volatile earnings, and contributes significantly to the nation's progress. The peculiarities of the Nigerian oil and gas industry calls make it compelling to revisit this question.

Miller and Modigliani (1961) proposed the dividend irrelevance theory with the assumptions that the capital market is perfect, that is, there is information symmetry, and that stock prices reflect all available information such that no single investor could outperform others. Under the perfect capital market conditions, Miller and Modigliani (1961) suggested that the dividend decision of a firm, regardless of its industry, remains financially inconsequential. Thus, the theory positioned that firm value is determined solely by the company's investment policy and its earnings power. However, Gordon (1963) and Lintner (1962) disagrees with the M&M proposition and propounded the bird-in-hand theory which emphasizes that dividend is completely relevant and important in the determination of the value of a firm. The dividend relevance theory asserts that investors prefer the certainty of current dividend income over capital appreciation in the future because the future is uncertain. This suggests that dividend payments should be positively linked with share prices. Jensen and Meckling (1976), Ross (1977), and Brennan (1970) provide subsequent theories to contribute to the debate. These theories range from the agency cost framework, signaling hypothesis, and the tax preference theory respectively, and these have offered partial but incomplete discussions to the behaviour of corporate dividend (Papa, 2025).

The capital market in Nigeria is characterized by some element of inefficient capital market, macroeconomic volatility, high inflationary pressure, and instability in foreign exchange, as well as, external financing crises (Adediran & Alade, 2015; Monogbe & Ibrahim, 2015). These unconducive attributes may alter the conventional and theoretical valuation effects of dividend policy in ways that are different from what is obtainable in developed financial markets. Furthermore, within these awkward economic environments, the Nigerian oil and gas sector stands at a pivotal point. Adeleye et al. (2025) explains that the Nigerian oil and gas industry accounts for a lop-sided share of Nigeria's foreign revenue and government receipts. However, despite this, the companies in the industry have heterogeneity dividend behaviour which ranges from consistent payment to firms with zero dividend payment.

It is against this backdrop that this study makes three core contributions. First, the study provides sector-specific evidence on dividend policy influence by paying particular attention on the Nigerian stock market, and the oil and gas sector, specifically. Second, the study considered a long horizon panel dataset from 2010 to 2025, and this captures the structural shifts in the industry's earnings dynamics, investors preferences, and also, political shifts over a period of commodity price cycles. Lastly, this study employs rigorous diagnostic testing in order to ensure reliable and robust findings.

The rest of this paper is structured as follows. Section 2 looks at a critical review of the literature, including conceptual clarifications, theoretical underpinning, and empirical investigations. In section 3, the methodology employed in the study is adequately described while section 4 considers data analysis and discussion. The study's conclusions and recommendations are provided in section 5.

2. Literature Review

Conceptual Review

Dividend Policy

Dividend policy refers to the set of decisions that a company uses to determine the proportion of its earnings to be distributed to shareholders and the proportion to maintain as retained earnings

for reinvestment. Dividend policy decision is entrenched in a firm's capital structure and broader financial architecture, investment strategy, and the management of its liquidity (Al-Malkawi et al., 2010). According to Black (1976), dividend puzzle emanates from the multiplicity of factors that concurrently bear on the firm's decision. These factors include profitability and liquidity, leverage, investment opportunities, capital structure and ownership concentration, and market conditions. Anandita and Septiani (2023) argue that dividends can be distributed in various forms such as cash, stock, or liquidating dividends and each form carries a distinct implication for valuation. Hariyani et al. (2021) looked at the governance perspective to the payment of dividends and argue that it serves as a signaling point to the explanation of the financial soundness and commitment of the company to resource distribution. This explanation, therefore, provides basis for the solution to the agency problem by reducing the conflicts between shareholders and managers. Fama and French (2001) highlight profitability, investment opportunity, and firm size as primary determinants of dividend policy and Louziri and Oubal (2022) established that larger corporations with steady cash flows and improved access to financial market tend to maintain a more dependable dividend schedules. In addition to the determinants of dividend policy, Abdullah (2021) explains that leverage serves as a constraining factor. This implies that firms with high debt profile are mostly faced with greater pressure to be conservative with earnings and this could lead to a reduction in the propensity to pay dividends.

Shareholder Value

Kapoor (2009) explains the concept of shareholder value as the economic worth that is accrued to shareholders based on an efficient utilization of resources and sustained earnings generation. This serves as the bedrock on which the most significant and overarching financial objective, maximization of shareholders' wealth, stands on. The determinants of shareholder value could include profitability and earnings growth (Fiordelisi & Molyneux, 2010), dividend policy (Ofori-Sasu et al., 2017), corporate governance quality (Jo & Harjoto, 2011), and the growing influence of ESG performance (Zumente & Bistрова, 2021). In this study, share price serves as the proxy for shareholders' value, because it reflects the stock market's real-time evaluation of a corporation's earning capacity and prospect.

Theoretical Review

Miller-Modigliani (M&M) Dividend Irrelevance Theory

The M&M (1961) proposition was built on the assumption of perfect capital market which is characterized by no taxes, transaction costs, and information asymmetries. In this situation, dividend policy is considered irrelevant to firm value. The aforementioned conditions give room for the production of a desired stream of income by investors based on portfolio rebalancing and this implies that the proportion of dividend shared and retained has no independent valuation content. The dividend irrelevance proposition suggests that firm value is fully gritty by the superiority and scale of the primary investment opportunity set. The M&M dividend irrelevance theory has been scrutinized by different scholars. Black and Scholes (1974) confirmed that there is no statistically significant connection between dividend yield and stock returns. Al-Malkawi et al. (2010) disagrees by stating that the suitability of the theory, under the real-world market

conditions, is limited. Kowerski and Haniewska (2022) further criticized the perfect capital market assumption of the theory as being implausible. Dung (2024) challenged the implied semi-strong market efficiency, especially in developing economies that are characterized by information challenges are pronounced. These criticisms set the foundation for alternative theoretical options.

Dividend Relevance Theories

Gordon (1963) and Lintner (1962) built an alternative theoretical backing for the explanation of the relationship between dividend policy and firm value through the bird-in-hand hypothesis as an aftermath contribution from Graham and Dodd (1934) proposition. The theory states that investors prefer current dividend income over an uncertain future capital gain based on the time value of money theory and risk aversion strategy. The bird-in-hand theory explains that there is a positive relationship between dividend payout and share price due to the reduction in investors' perceived uncertainty. Walter (1963) dividend relevant model further explains that optimal dividend policy is a function of the nexus between the internal rate of return of a firm and its cost of equity. The signaling theory (Ross, 1977; Bhattacharya, 1979), agency cost hypothesis (Jensen & Meckling, 1976; Easterbook, 1984), and the tax preference theory (Brennan, 1970) are the three auxiliary propositions that elaborate on the apparatuses through which dividends influence firm value. The signaling theory assumes that dividends payment signals managerial confidence to investors which could positively impact future earnings and reduce information asymmetry. The agency cost theorem helps management to be more financially discipline and channel resources to profitable investments only. Finally, the tax preference theory explains that in the event that capital gain interests lower effective tax rates than dividend income, shareholders may prefer firms to retain earnings, signifying negative effect between dividend yield and pre-tax required returns. However, the empirical applicability of these various relevance theories depends on the context for which it is referred. Signaling theory may dominate in markets characterized by strong information sharing strategy and efficient price discovery. In capital inefficient market like Nigeria which is also characterized by weak governance, the agency theory could be more salient (Monogbe & Ibrahim, 2015; Adediran & alade, 2015).

Empirical Review

Dividend policy and the value of a firm possess highly vast and geographical diverse empirical literature, yet, these different studies have produced persistently mixed findings. The empirical dispute on dividend policy and shareholders wealth is one of the most enduring questions in corporate finance. The conventional dividend irrelevance proposition of Miller and Modigliani indicates that under perfect market conditions, dividend decisions should not influence firm value. However, new empirical evidence from emerging and developed economies is increasingly in contrast with this assumption. The reviewed studies show that dividend policy may have a direct impact on shareholders' wealth through the market price per share, share price volatility, dividend payout ratio and firm value or an indirect impact through profitability, earnings expectations, ownership structure, investor sentiment and macroeconomic conditions.

The literature shows a substantial thread of support for the value relevance of dividend policy. Eryomin et al. (2021) looked at how

the dividend policy of Russian firms influences their value and found that it has a positive influence on firm value. This connotes that investors prefer and follow firms with a stable and appealing dividend payment policy with a positive influencing impact on the value of such firms. Likewise, Dang et al. (2020) in their analysis of the Vietnamese stock market used the generalized least squares approach and found that dividend policy is a key factor in determining firm value. The results are consistent with the signaling theory of dividends which holds that dividend payments send signals of management's confidence in future earnings capability and financial stability.

Evidence from African and Asian markets also support the relevance of dividend policy. The telecoms business in Cameroon was studied by Phungeh et al. (2023) and discovered that the M&M dividend irrelevance theorem does not apply to firms in the economy because dividend payment significantly influences market prices of stocks. In consonance with Phungeh et al. (2023), da Silva (2024) equally found compelling evidence to believe that the dividend relevance theorem is highly applicable in the Euronext Lisbon Portuguese Stock Index. The convergence of findings from Cameroon and Portugal is important because it demonstrates that dividend policy relevance is not confined to developing or frontier markets only, but may also be true for more mature capital markets, where investors still interpret dividend decisions as value relevant signals.

In the Indonesian context, Mahirun et al. (2023) stated that there is also a positive relationship between the dividend payout ratio of firms in the industry and their stock prices, signaling that higher dividend payouts promote higher valuation by investors. This validates the earlier stance of Suganda and Sabbat (2014) who stated from signaling theory perspective that dividend payment ratio has an influence on market price of shares. From this perspective, a rise in dividend distribution can imply a solid performance, financial stability and management confidence, which would lead to an increase in the investor demand for the shares and, hence, an increase in the market price per share. Taken together these findings demonstrate that dividend payout is not only a distribution decision but also an informational process via which corporations signal financial strength to the capital market. However, the empirical evidence is not fully consistent. Foong and Abdulmalek (2022) use firms in the Malaysian economy and found that there is no significant connection between dividend policy and financial performance metrics like return on equity and return on assets. This conclusion contradicts with research that demonstrate a positive association between dividends and value and suggests that dividend policy may not always be translated into improved accounting performance. One probable explanation is that return on equity and return on assets are internal accounting-based performance measures, but many other studies compare dividend policy against market-based outcomes like share price, firm value, capitalization or shareholder wealth. Therefore, the inconsistency may be partly due to the disparities of market efficiency, investor behaviour, variable measurement and the distinction between accounting performance and market valuation.

In the Nigerian economy, the significance of dividend policy to firm value and growth holds some empirical backing, although the pace and direction of the relationship varies according to literature. Koleosho et al. (2022) investigated the dividend policy and share

price volatility of firms listed on the Nigerian Stock Exchange and concluded that dividend policy had a large and beneficial effect on share price volatility. Thus, dividend decisions can affect investors' trading behaviour and market expectations, and thereby influence price changes. Similarly, Nambukara-Gamage and Peries (2019) concentrating on retail enterprises between 2012 and 2017 revealed a positive and modest association between dividend policy and shareholders' wealth using panel regression. The finding implies that dividend policy does assist to wealth creation but its effect may not be unconditional and may depend on business specific variables such as profitability, growth potential, liquidity situation and sectoral characteristics.

Monogbe and Ibrahim (2015) further validated the Nigerian evidence by examining selected quoted firms and reported that there was a positive and significant correlation between firm performance and dividend policy. The study demonstrated that dividend policy was positively related to return on capital employed, investment and earnings per share. This means that profitable corporations will be more inclined to continue paying dividends, which might raise shareholders' expectations of future returns. The writers additionally maintained that enterprises should properly utilise and manage available cash to achieve more profit which may eventually result in higher dividends to shareholders. This perspective is in accord with the general notion that dividend policy is intimately related to business performance, internal efficiency, and corporate governance rigour.

However, other Nigeria-based studies seem to be less supportive of the dividend relevance hypothesis. Nguyen and Li (2019) considered dividend policy and the institutional ownership in the country and found that dividend payout ratio follows the M&M pattern of no relevance. This assumes that dividend policy may not be sufficient to influence share value in all situations. However, this finding contrasts the findings by Koleosho et al. (2022), Nambukara-Gamage and Peries (2019), and Monogbe and Ibrahim (2015), who positioned positive and significant relationship between dividend policy and shareholder value. This variance may be due to differences in model specification, choice of dependent variable, sample composition, period of study, and the influence of institutional investors in determining expectations about dividends. It also suggests that the dividend policy may not be independent but may depend on market liquidity, investor sophistication, regulatory environment and firm-level governance structures. Ownership structure is another key channel via which dividend policy can affect corporate value. Widiatmoko et al. (2020) applied purposive sampling and panel regression to investigate the link between ownership structure and dividend policy with firms listed in the Indonesian stock market between 2016 and 2018. Their results indicated that institutional ownership has an important effect on dividend policy. This implies that institutional investors could influence management to implement dividend policies that respect shareholders' interests and decrease agency concerns. Whereas the research focused on dividend policy as an independent determinant of business value, Widiatmoko et al. (2020) shift the attention to the governance determinants of dividend policy itself. This view is valuable because it illustrates that the level of ownership concentration, the strength of the monitoring process, and the preferences of institutional investors may influence dividend decisions.

Hemadivya and Devi (2013) also reported that stable or increasing profits influence investors' expectations, which results in increased market values of stocks. This is consistent with the concept that earnings stability boosts investor confidence and promotes corporate valuation. However, based on empirical evidence from the stock of HP, Mohamed et al. (2021) stated that rises in stock price are not driven solely by earnings growth but also dividend policy and market conditions. This shows that the wealth of shareholders is dependent on the performance of the firm and the overall market environment. Thus, while earnings per share is a straightforward valuation variable, it can be inflated or deflated by dividend policy, investor expectations and market conditions to influence market price per share.

Another indication of valuation that is pertinent to the dividend–shareholder wealth issue is the price earnings ratio. A higher price earnings ratio means that investors predict better future earnings growth. As Liu et al. (2023) stated, investor sentiment along with profits consistency may propel market values as it increases investors' confidence. This implies that valuation is not solely mechanical but may also depend on behavioural expectations in the market. However, the relationship between price earnings ratio and market price per share may be less predictable in developing nations such as Nigeria where macroeconomic volatility might affect investment decisions. Utami (2021) which studied investment choice variables such as interest rate. The results showed that high interest rate negatively affected business value assessed by market price per share. This means, even if corporations have good profitability or good dividend policies, macroeconomic circumstances such as inflation and interest rate could dampen investors' desire for equities.

The studied literature therefore reveals that dividend policy, earnings per share, profitability and price earnings ratio are conceptually and empirically related to market price per share and shareholder wealth. However, the strength of these correlations is heterogeneous between countries, sectors, methodology and market situations. Studies from Russia, Vietnam, Indonesia, Cameroon, Portugal and Nigeria generally support the importance of dividend policy particularly when stock price, company value, shareholder wealth or capitalisation as market-based variables are employed.

The Nigerian literature, in particular, exposes a substantial research gap. Several studies like Adediran and Alade (2013), Adesola and Okwong (2009), Luke (2011), Monogbe and Ibrahim (2015), and Ojeme et al. (2015) have investigated the relationship between dividend policy and shareholder wealth but many of them have been general in their approach and not specific to firm characteristics and sector-based characteristics. Even with these studies, providing significant foundational data, the dynamic economic environment in Nigeria, including inflationary pressure, interest rate volatility, changing accounting rules and shifting investor behaviour, demands further empirical attention. Moreover, the dividend policy question is unsolved as previous findings are mixed and there is no widely accepted explanation of how enterprises should balance the dividend distribution and the earnings retention.

Overall, the empirical literature suggests that dividend policy is mostly value relevant, particularly in emerging markets where investors may view dividend payments as signs of financial health,

managerial confidence and reduced agency risk. But the link is not automatic nor universal. It depends on the profitability of the firm, earnings capacity, ownership structure, regulatory environment, investor attitude, interest rate environment and the methodological methodology used by the researchers. The present study is justified in the sense that it aims to extend the literature by investigating the relationship between dividend policy and shareholders' wealth in a more specific empirical environment, whilst considering the roles

of earnings, valuation measures and market conditions. The focus on the gaps of context, methodology and variables-measurement in the recent studies, this study contributes to the ongoing debate on whether dividend policy enhances shareholder wealth or the effect of dividend policy depends on firm-specific and market-specific characteristics.

Table 1 provides a summary of the empirical review

Table 1: Summary of Empirical Literature

Author(s) & Year	Country/Market	Key Variable(s)	Method	Key Finding
Widiatmoko et al. (2021)	Indonesia (IDX)	Dividend policy, ownership structure	Panel regression	Institutional ownership significantly influences dividend policy
Koleosho et al. (2022)	Nigeria (NSE)	DPR, share price volatility	Panel regression	Dividend policy positively and significantly influences share price volatility
Foong & Malek (2022)	Malaysia	Dividend policy, ROE, ROA	Regression	No significant relationship between dividend policy and firm performance
Eryomin et al. (2021)	Russia	Dividend decisions, firm capitalisation	Statistical analysis	Dividend decisions positively affect firm capitalisation
Phungeh et al. (2023)	Cameroon (Telecom)	M&M relevance, market prices	Regression	M&M irrelevance proposition rejected; dividends determine stock prices
da Silva (2024)	Portugal (Euronext)	M&M relevance	Panel data	M&M irrelevance proposition invalid for Portuguese listed firms
Mahirun et al. (2023)	Indonesia	DPR, stock prices	Panel regression	DPR positively connected with stock prices
Gharaibeh et al. (2022)	Jordan	EPS, stock prices	Regression	Positive relationship between earnings per share and stock prices
Dang et al. (2021)	Vietnam	Dividend policy, firm value	GLS	Dividend policy significantly determines firm value
Nguyen & Li (2020)	Nigeria	DPR, institutional holdings	Panel data	DPR insignificant in influencing future dividend yield
Utami (2021)	Indonesia (IDX)	PER, interest rate, firm value	Regression	High interest rates negatively impact stock prices; PER's effect unclear

Note: Source: Authors' compilation from reviewed studies, 2026. DPR = Dividend Payout Ratio; EPS = Earnings Per Share; PER = Price-Earnings Ratio; ROE = Return on Equity; ROA = Return on Assets.

Research Gap

The reviewed literature considered a number of gaps which this study addresses. First, there is a sector-specific gap in that the dividend policy dynamics operational in the Nigerian oil and gas industry has not been exploited and investigated. Second, there is the long temporal coverage, ranging from 2010 to 2025 and which covers various periods of change in democratic government, and characterized by mixed economic policies that affect stock market,

particularly, the valuation behaviour among the oil and gas firms. Third, this study concurrently examines dividend payout ratio, earnings per share, and price-earnings ratio within a single panel regression model. This is done through proper diagnostic testing validation and provides a better integrated assessment than other prior studies in Nigeria.

3. Methodology

This research uses a quantitative and positivist research approach.

This is grounded on the epistemological tradition of objective knowledge generalization through empirical observation. A descriptive research design is employed with ex-post facto data generation through investigations into the financial reports of the listed oil and gas firms in Nigeria. The particular advantage of this form of secondary data is that they are readily available and cannot be altered by the researcher. The study's population comprises of all quoted oil and gas firms on the floor of the Nigerian Exchange Group (NGX). Specifically, there are seven (7) listed oil and gas firms in NGX and they are ARADEL Holdings Plc., COINOIL Plc., ETERNA Plc., JAPPAUL Gold & Ventures Plc., OANDO Plc., SEPLAT Energy Plc., and TOTAL Energies Marketing Nigeria

Table 2: Measurement of Variables

Variable	Type	Symbol	Measurement	Data Source
Share Price	Dependent	SP	Closing market price per share at year-end (₦)	NGX / BLOOMBERG
Dividend Payout Ratio	Independent	DPR	Dividends per share ÷ Earnings per share (ratio)	Annual financial statements
Earnings Per Share	Independent	EPS	(Net income – Preferred dividends) ÷ Weighted avg. shares outstanding (₦)	Annual financial statements
Price-Earnings Ratio	Independent	PER	Market price per share ÷ Earnings per share (multiple)	Annual financial statements / NGX

Source: Researchers' Computation, 2026.

Model Specification

The panel regression model estimated for this study takes the following form:

$$SP_{it} = \alpha_0 + \alpha_1 DPR_{it} + \alpha_2 EPS_{it} + \alpha_3 PER_{it} + \mu_{it}$$

Equ. 1.

Where SP is the share price of firm i at time t and a measure of the dependent variable and shareholders' value; DPR is the dividend payout ratio; EPS is earnings per share; PER is the price-earnings ratio; α_0 , α_1 , α_2 , and α_3 are parameters to be estimated while μ is the stochastic error term.

A priori expectation hypothesizes that there would be positive relationships between share price and the dividend policy variables such that α_1 , α_2 , and $\alpha_3 > 0$. And this is found to be in line with the bird-in-hand proposition.

Table 3. Summary of Descriptive Statistics

Statistic	SP (₦)	DPR (ratio)	EPS (₦)	PER (multiple)
Mean	3.42	0.561	17.42	0.471
Maximum	29.87	20.00	90.40	23.30
Minimum	0.18	-0.04	-48.90	-0.09
Std. Deviation	5.461	2.193	24.92	2.545
Skewness	2.740	8.445	1.061	8.761
Kurtosis	10.939	75.335	4.564	78.994
Observations	84	84	84	84

Note: Source: Researchers' Computation (2026). SP = Share Price; DPR = Dividend Payout Ratio; EPS = Earnings Per Share; PER = Price-Earnings Ratio.

Plc. The sample for this study would have been the entire population but ARADEL Holding Plc was excluded due to incomplete data record arising from its comparatively recent full listing. The study period was between 2010 and 2025, leaving the study with 84 firm-year observations. Given that the study's sample comprises of almost the population in the oil and gas industry, concerns leading to sampling bias are minimal.

Secondary data were sourced from the audited annual financial reports of the selected firms. These data were supplemented using evidence from the official portal and website of the NGX and cross examined through BLOOMBERG database. In Table 2, a summary of the measurement of the variables is presented.

Method of Data Analysis

In a panel regression, there are three possible analyses: pooled regression, fixed effect (FE), and random effect (RE) regressions. However, diagnostics examination such as multicollinearity, heteroskedasticity, Lagrange multiplier, and the Hausman specification test are important in making the most appropriate analytical technique. In order to enrich the analysis, pre-econometric analysis such as descriptive statistics and correlation matrix were estimated.

4. Data Analysis And Discussion Of Findings

Descriptive Statistics

The descriptive statistics presented in Table 3 provides a summary of the variables employed for the study.

The result shows that the average share price stood at ₦3.42 which is confirmed to be in relative terms with its standard deviation value of ₦5.46 and signals pronounced cross-sectional heterogeneity and temporal price volatility among the listed firms. Also, it depicts that it is consistent with the commodity-driven earnings cycles attributes of the Nigerian oil and gas industry. The result further added that maximum share price stood at ₦29.87 which is at contrast with the minimum value (₦0.18), and underscores the substantial disparity in market valuations across firms and periods. The result shows that the mean dividend payout ratio of 0.561 explains that the firms distribute about 56% of its earnings as dividend. This is considered to be relatively high payout ratio by firms in an emerging financial market like Nigeria,

Table 4: Pairwise Correlation Matrix

Variable	SP	DPR	EPS	PER
SP	1.0000	—	—	—
DPR	0.039 (0.723)	1.0000	—	—
EPS	0.757*** (0.000)	-0.011 (0.919)	1.0000	—
PER	-0.007 (0.949)	0.972*** (0.000)	-0.076 (0.490)	1.0000

Note: *p*-values in parentheses. *** *p* < 0.01. Source: Researchers' computation (2026).

The result of the correlation analysis shows that there is a positive, strong, and highly significant ($r = 0.757$; $p < 0.001$) between share price and earnings per share. This indicates that earnings per share is a primary driver of stock prices in the Nigerian oil and gas industry. This is considered to be in consonance with the propositions of the efficient market hypothesis that prices capitalize expected earnings. The correlation coefficient and probability value between share price and dividend payout ratio is positive, weak, and statistically insignificant ($r = 0.039$; $p = 0.723$). This indicates that dividend policy does not exert a meaningful influence on the valuation of firms in the oil and gas sector. The result further states that there is a very strong, positive, and highly significant correlation between dividend payout ratio and price

Table 5. Breusch-Pagan Lagrange Multiplier Test for Random Effects

Test	Cross-Section	Time	Both
Breusch-Pagan Statistic	20.973***	3.264	24.236***
(<i>p</i> -value)	(0.0000)	(0.0708)	(0.0000)

Note: *** *p* < 0.01; *p* < 0.10. Null hypothesis: No unobserved panel effects (i.e., pooled OLS is appropriate). Source: Researchers' computation, 2026.

The result from the Breusch-Pagan LM statistic for the cross-section component produces a chi-square value of 20.973 with a corresponding probability value of <0.001 and a joint statistic chi-square value of 24.236 and probability less than 1% which strongly indicate that the null hypothesis of pooled regression being

yet, it this result is accompanied by extreme outliers, with maximum value being 20.00, and reflecting occasional loss-year distributions that produced technically high ratios. The maximum earnings per share of ₦90.40 against its minimum value of ₦48.90 shows that high earnings in the Nigerian oil and gas firms are accompanied with crude oil price fluctuations and downstream market dynamics. Furthermore, all variables exhibit positive skewness and excess kurtosis, confirming leptokurtic, non-normal distributions, which are common attributes of financial panel data.

Correlation Analysis

The correlation test is used to examine the degree of association of the variables and their respective direction of relationship. In Table 4, a summary of the Pairwise correlation matrix is presented.

earnings ratio ($r = 0.972$; $p < 0.001$) and this connotes that there is an arithmetic linkage between the two ratios, with both being derived using the earnings per share as its denominator and shows structural relationship. However, the relationship flags potential multicollinearity warnings in its regression analysis stage. Lastly, share price was found to have a negative but trivially correlation with price earnings ratio ($r = -0.007$; $p = 0.949$), indicating that there is no meaningful linear relationship between both variables in the Nigerian oil and gas industry.

Panel Regression

The study investigates some diagnostics tests before delving into the regression analysis proper. These include the Breusch-Pagan Lagrange Multiplier Test and summarized in Table 5.

appropriate, rejected. Thus, since the LM test shows that the pooled regression is not appropriate, it is important to investigate the appropriateness of the random effect through the Hausman specification test. Its result is presented in Table 6.

Table 6. Hausman Specification Test Results

Test Summary	Chi-Square Statistic	Degrees of Freedom	Probability
Cross-section random	0.000	3	1.0000
Period random	0.000	3	1.0000

Test Summary	Chi-Square Statistic	Degrees of Freedom	Probability
Cross-section and period random	0.000	3	1.0000

Note: Null hypothesis: Random effects estimator is consistent (no systematic correlation between regressors and unobserved individual effects). Source: Researchers' Computation (2026).

The Hausman specification test produces a statistic chi-square value of zero (0) with p-value 1.0000 across all its dimensions and fails to reject the appropriateness of the random effect. The degenerate Hausman statistic may reflect the absorptive capacity

of the observed regressors for cross-sectional heterogeneity (Wooldridge, 2010). Thus, the result shows that, collectively, the adoption of the two-way random effect regression is justified.

Random Effects Regression Output

Table 7: Two-Way Random Effects Panel Regression Results (Dependent Variable: Share Price)

Variable	Coefficient	Std. Error	t-Statistic	Probability
Constant (C)	0.6001	0.5249	1.1432	0.2564
DPR	-0.1283	0.7997	-0.1605	0.8729
EPS	0.1602***	0.0166	9.6273	0.0000
PER	0.2164	0.6894	0.3140	0.7544
Model Diagnostics				
R ²	0.5499		Adj. R ²	0.5330
F-statistic	32.578***		Prob (F-stat)	0.0000
Durbin-Watson	0.7689		Root MSE	3.4441
Observations	84		Panel Firms	6

Note: *** $p < 0.01$. Standard errors are robust. Method: Panel EGLS (Two-way random effects). Source: Researchers' Computation (2026).

Discussion of Results

Dividend payout ratio and share price

The coefficient on DPR is estimated at 0.128 ($p = 0.873$) showing dividend payout ratio has a statistically insignificant and slightly negative effect on share prices in the Nigerian oil and gas industry for the period of study. Thus, null hypothesis (H_1) is not rejected. This finding is consistent with the dividend irrelevance proposition of Miller-Modigliani (1961), indicating that investors in this sector do not seem to attribute an independent valuation significance to dividend distributions when earnings quality and growth prospects are controlled for. This finding can be explained by several reasons in the Nigerian oil and gas context. The industry is characterized by capital intensive reinvestment needs, especially in upstream exploration and production activities, which may make dividend distributions economically sub optimal when compared to retained earnings deployment. Consequently, dividend income today may be less appealing to the long-term investors in this industry than capital appreciation driven by earnings. Second, the weak institutional environment and informational inefficiencies of the Nigerian stock market may reduce the signaling power of dividend announcements, thus reducing their price-discovery significance. Third, the negative but insignificant coefficient found might partly reflect the tendency of financially stressed firms to maintain or increase dividends as a face-saving signal, precisely when declining earnings are pushing down share prices. This inverse dynamic is consistent with the 'smoothing' behaviour of dividends

documented by Lintner (1956) and others. These findings substantiate the results found by Nguyen and Li (2020) for the general Nigerian market, and Foong and Malek (2022) for companies in the Malaysian stock market, but oppose the positive dividend findings commented by Phungeh et al. (2023) for Cameroon, Mahirun et al. (2023) for Indonesia, and da Silva (2024) for Portugal.

Earnings per share and share price

Earnings per share was the dominant and statistically significant determinant of share price in the regression result ($\beta_2 = 0.160$; $t = 9.627$; $p < 0.001$). So, the study rejects the null hypothesis (H_2). It explains that a ₦ increase in EPS is strongly linked with a ₦0.160 increase in the share price, ceteris paribus. In isolation, the magnitude of this effect is small, but in the context of the high earnings volatility that is typical of the sector, the range of ₦139.30 in EPS (–₦48.90 to ₦90.40) implies a potential SP variation of about ₦22.33 attributable to EPS dynamics alone, a range that covers the bulk of the observed SP dispersion (₦0.18 to ₦29.87). This result is theoretically consistent with the earnings capitalization model and the Efficient Market Hypothesis (in its semi-strong form) under which share prices incorporate publicly available earnings information instantaneously. Behaviourally, the Nigerian oil and gas investors seem to focus on earnings fundamentals as the primary valuation anchor, preferring the prospect of compounded capital gains through profitable reinvestment rather than current income from dividends. This

preference structure is consistent with the behaviour of rational investors predicted by the Miller-Modigliani framework where investment policy is more important than dividend policy in value creation. This finding supports the evidence of Gharaibeh et al. (2022) for Jordan, Hemadivya and Devi (2013) for India and Mahirun et al. (2023) for Indonesia.

Share price and price-earnings ratio

The PER coefficient value of 0.216 ($p = 0.754$) indicates a positive but statistically insignificant effect on share prices, so the null hypothesis (H_3) is not rejected. This is a noteworthy result considering that PER and SP are arithmetically related ($PER = SP/EPs$), and one could a-priori expect this to create a mechanical association. Here, the lack of significance is likely due to the confounding effect of earnings volatility, because when EPS is highly volatile, as is the case for commodity-related sectors, PER multiples become unstable and informationally ambiguous, thereby reducing their valence as independent price drivers. This result is in line with Utami (2021) who shows that the macroeconomic factors, in particular the high interest rate, dampens the price relevant information content of PER in developing markets where the real rate of return discount applied to earnings is also highly volatile.

Model fit and joint significance tests

The coefficient of determination ($R^2 = 0.5499$) indicates that the three explanatory variables together account for about 55% of the total variation in share prices across the sample. This shows a respectable level of explanatory power for a parsimonious three-predictor model in a volatile commodity-linked equity market. The F-statistic of 32.578 ($p < 0.001$) validates the overall specification of the model, confirming its joint statistical significance. The remaining 45% of unexplained variation could be due to macroeconomic factors (exchange rate, inflation, oil price cycles), firm-level governance characteristics, capital structure dynamics or global investor sentiment, all of which are important directions for model extension in future research.

One potential concern that should be mentioned is the relatively low Durbin-Watson stat of 0.769, indicating positive autocorrelation in the panel residuals. Although the random effects EGLS estimator can partially account for residual correlation, future work should investigate the use of panel-corrected standard errors (PCSE) or AR (1) disturbance corrections to address this limitation.

5. Conclusions And Recommendations

This study examined the effect of dividend policy on shareholder's value as proxied by share price for six firms in the Nigerian oil and gas industry listed on the NGX over the period 2010–2025. The study yields three main findings on the basis of a two-way random effects panel regression selected on the basis of Breusch-Pagan LM and Hausman specification tests. First, dividend payout ratio has an insignificant and slightly negative effect on share prices, in line with the Miller-Modigliani (1961) dividend irrelevance proposition. Second, earnings per share is a positive, significant and economic meaningful determinant of share price ($p < 0.001$). This underlines the primacy of earnings fundamentals in investor valuation decisions within the sector. Third, the positive but insignificant relation of the price-earnings ratio with the share price indicates the erosion of its information content in the presence of high earnings volatility and macroeconomic uncertainty.

The findings of this study question the conventional dividend policy prescriptions in the Nigerian oil and gas industry. The results are consistent with the perspective that, contrary to the bird-in-hand hypothesis (Gordon, 1963), investors in this sector are not primarily concerned with current dividend income. Instead, they demonstrate a preference for capital appreciation rooted in earnings growth, a preference that may be the rational response to the industry's high reinvestment demands, the volatility of the macroeconomic environment in Nigeria and the informational limitations of dividend signals in a frontier capital market. The M&M dividend irrelevance proposition has strong empirical support, at least within the bounds of the current model, in this context. These findings have important implications for the theoretical literature. The conditionality of dividend policy effects, across markets, industries and institutional environments, further strengthens the case that no single universal theory can adequately explain corporate payout behaviour and its valuation consequences.

The empirical findings suggest the following recommendations for corporate managers, investors and policymakers:

- i. Oil and gas companies' management should implement transparent communication strategies with investors so as to realign shareholder expectations towards the long term value creation potential of earnings reinvestment rather than short term dividend income. This is particularly important for growth-phase companies with significant exploration and production opportunities.
- ii. Disclosure requirements on the rationale for dividend policy should be enhanced by regulatory authorities and the Securities and Exchange Commission (SEC) such that corporate announcements provide sufficient information on the sustainability of earnings and reinvestment plans. Enhanced disclosure can improve the price-discovery function of dividend signals in the Nigerian market.

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