

NIGERIA'S DIVIDEND POLICY AND STOCK PRICE VOLATILITY

Oladimeji J. Abiodun *

Department of Finance, Faculty of Management Sciences
University of Lagos, Akoka. Lagos
joladimeji@unilag.edu.ng

Sontan Olamiji

Department of Finance, Faculty of Management Sciences
University of Lagos.
olamiji1112@gmail.com

ABSTRACT

This paper explores the impact of dividend policy on stock price in the Nigerian stock market. Descriptive survey research strategy was utilised for this study and four research questions and four hypotheses generated to guide the investigation. All 199 shares trading on the Nigerian Stock Exchange's major exchange at the start of 2010 made up the research's demography which was later limited to include only businesses that had regularly paid dividends for a period of twelve years. 29 enterprises in all qualified for the selection for the period from 2010 to 2021. The study found out that the payout ratio positively affects the stock price, the findings also indicated that earnings per share has a substantial beneficial effect on the stock price and significant link between the size rate of a company and its stock price. It is thus recommended that businesses should maintain a continuous dividend pay-out to raise internal money available to undertake more profitable projects that will aid increased earnings.

Keywords: Dividend, Earnings per share, Payout ratio, Stock price.

INTRODUCTION

A contractual dividend strategy is a resolution that must be made about the disposition of a company's earnings, namely whether or not those revenues will be distributed to investors in the form of payouts. This plan considers not only the distribution of profits to shareholders, but also the amount reinvested in business operations and used to pursue new opportunities. When referring to the financial benefits (cash profit or incentive matter) distributed to shareholders, the term "dividend" is commonly used. When a company has reached a certain milestone, it will provide dividends to its shareholders. In the history of effective financial leadership, there have always been two schools of thought on the issue of dividends. This makes sense given the weighty influence the policy of dividends has on a company's finances and investment choices. Investors generally want to get the greatest return for their stock and dividends, thus the best dividend strategy ought to focus on maximising investment returns in addition to dividend payouts. Multiple researchers have attempted to resolve the conflicting perspectives around this topic. Some academics, including Miller and Modigliani (1961), contend that a dividend policy

has little bearing on a company's worth. They contend that the earnings of a company or its investment plan are more relevant in determining its value. They asserted that the ratio of retained earnings to distributions is not indicative of the value of the company. Dividend policy is deemed irrelevant by Black and Scholes (1973). Stock price has not been affected by dividend policy, according to Jakata and Nyamugure (2014) and Abrar-ul-haq, Akram, and Ullah (2015). The dividend policy of a company has also been found to have a major impact on its value. In addition to the work of Pani (2008), Akbar and Baig (2010), Masum (2014), Walter (1956), Gordon (1959), Jatmiko and Baig (2016), and others, there is additional research in these areas. Research findings on dividend policy have been contradictory, so this is a debatable topic until a consensus is reached.

The optimisation of the value of shareholders is the overarching goal of companies and other business structures. Managers advance the business's goal through their decisions about expenditures, financial matters and dividends. Choosing initiatives with an advantageous net current value is crucial when making investment choices. Financing choices include the stakeholder model chosen to minimise the company's expenditures of capital and the payouts of dividends distributed to shareholders and potential investors.

When executives make financial or monetary choices that potentially effect the bottom line, they run into the agency dilemma (Jensen & Meckling, 2016). The question of whether or not shareholders will benefit from a dividend payout remains open. Dividends are widely believed to reduce the investment of a business's capital while exclusively benefiting its stockholders. Over the past few decades, researchers have devoted a great deal of time and energy to studying the theoretical and empirical effects of dividend programmes. In principle, paying dividends out of a company's profits is the same as issuing new shares to the shareholders, but in actuality, the dividend will cause the stock price to decrease. Dividends would have no impact on owners' net worth in a perfect world (one without taxes and other limits). Variations in the value of stocks, like changes in dividend policy, occur frequently in the actual world.

The economic rationale for investors' need for dividends was first provided by Graham and Dodd (1934). Walter (1963) and Gordon (1959, 1962) codified the dividend relevancy hypothesis. They argued that stockholders should value the stock at its current price since it is equivalent to

the present value of all future dividends. To find out more about the dividend argument, another academic looked into it. If dividends were subject to the tax rates of each shareholder, most would choose a smaller cash payout. Individual income tax rates are inversely proportional to the maximum dividend payout (Pye, 2012). Research on dividend effects has advanced theoretically in important ways. Most scholars agree that dividends have no effect on stockholder value in a perfect market. In reality, though, dividend announcements are important to shareholders due to the tax effects and the details they give.

The primary objective of this study is to examine the effect of the payout policy on the market worth of equities listed on the Nigerian Stock Exchange while the specific objectives was to assess how the dividend system affects the value of stocks in the Nigerian stock market, to analyze the impact of the payout percentage on stock prices in Nigeria, to determine the impact of income per capita on the value of stocks in the Nigerian equity industry and to analyze how the price-to-market-value ratio impacts the worth of equities traded on the Nigerian stock exchange. The research questions and hypotheses were formulated in line with the research objectives.

REVIEW OF LITERATURE

According to Nwude (2003), a dividend policy's overarching objective is to optimise shareholders' wealth, which depends on both dividends and capital gains. He describes dividend policy as the rules by which a firm decides how much of its annual net profit after taxes should be distributed to its shareholders. Not all thriving government-owned businesses have met the standards of the dividend programme, a research by Mishra and Narender (1996) found. Emekekwe (2005) opined that a dividend strategy should specify how much of an organization's revenue will be distributed as dividends and how much would be kept in the business. Retained earnings are a major funding source for company endeavours. On the other hand, a dividend is the amount of a company's earnings that remains after taxes and is distributed to the investors of that business. A dividend provides owners with access to a supply of financial liquidity.

Companies' policies on dividends vary, as Emekekwe (2005) found. Some adapt with the business cycle, whereas others remain constant. Most so-called growing corporations use the

proceeds from their operations to pay for a paltry dividend to their shareholders. However, if the organisation wants to allow shareholders to have discretionary influence over the cash flow of the business, this runs counter to the goal of providing funding to build resources for the goal of financing expansion campaigns, serving existing debts, and increasing the possibility for the organisation to generate income as a result. A high rate of retained earnings results in owners having less disposable income. Similarly, if a substantial amount of corporate profits is distributed as dividends, the company won't have enough money left over to pay off its debts and reinvest in new projects. Retained profits are typically believed to cause a decline in the market value of stocks since they serve as a cushion for the company's potential future earnings. According to Basse (2009), when faced with a rising price level, businesses appear to boost their dividend payments in an effort to stabilise the real worth of dividend income. As a result, rising inflation is a key factor in dividend growth.

There are five different kinds of dividends that pay out, according to Nwude (2003). These include stock splits, reverse stock splits, stock or share splits, cash dividends, stock dividend or bonus issues, and stock repurchases. When a dividend is paid out, it is typically done so in the form of cash. Companies should declare dividends and distribute the proceeds in cash. The overall assets and net worth of a corporation are reduced when cash dividends are paid out because the balance sheet entries for cash and reserves are decreased. A corporation should have adequate cash reserves before declaring a cash dividend. When the surviving shareholders of a corporation are paid a dividend in the form of newly issued shares, this is known as a stock dividend. Capitalization is the process of taking money from a company's reserves account and using it to buy more shares of stock. Since no money leaves the company, liquidity is maintained. As an added bonus, shareholders also receive dividends, which can be cashed out whenever they choose. Nevertheless, if the profits that are retained don't create a respectable rate of return, the value of the stock might decline as the amount of shares owned rises; this is particularly true if there is a significant releasing of stocks by investors in the stock market. The value of a dividend paid on stock is determined by the number of shares an investor currently owns. Stock or Share Split means double the current share count or halving the current share price. A stock split does not change the overall amount of shares in circulation, but it does cut the initial cost per share by 50%. Administration employs a stock split to reduce the cost of its shares on the stock exchange, which is intended to increase trading activity. In spite of the fact that a split of stock does not

affect the total worth of the company's assets or liabilities, it does affect the amount of shares in circulation and the corresponding book entry. For reverse stock split, in financial markets, a stock split that is reversed is a method for reducing the overall quantity of shares in circulation while simultaneously boosting the real value of an existing share issuance. When a company buys goods for its shares on the public market, it is increasing its stock equity. Stock purchase may be necessary to lower the amount of open shares and hence boost profits per share (EPS), market value per share (MPPS), and the entire return on investment for investors for those shares that are not repurchased. Dividend payments stand in for capital appreciation.

In a market without an information gap, all market participants (managers, financial institutions, stockholders, etc.) have the same access to all relevant information. When a particular section within an organisation knows more than another regarding its current predicament and potential outcomes, a disparity in knowledge exists. Management typically has greater access to confidential information about their company than the broader public.

The financial media frequently reports on dividend policy changes, including rises, cutbacks, and suspensions or resumptions. In general, stock prices increase when rewards are added or raised, and fall when they are reduced or withdrawn. According to several chief financial officers of major US corporations, the dividend policy of an organisation can be a predictor of its long-term success (Amihud and Li, 2005).

Since splits of shares primarily affect numerical adjustments to the market value of the share designation and have little effect on investors' relative ownership of the shares, they continue to be one of the most perplexing contradictions in the upward trajectory of the valuation and fluidity of shares. Nonetheless, historical data suggests that stock values rise after a division. The metric principle, which posits that companies employ splits of stocks to indicate potential good revenue, was backed by Grinblatt et al. (1984) and Lamoureux and Poon (1987). Managerial comments that the objective of splitting initiatives is to bring stock prices down to a targeted market spectrum and increase fluidity provides support for the different mobility and marketplace range thesis. Recent empirical studies, however, have shown that the effect of split on fluidity varies. Research by Copeland (1979) and Conroy and Harris (1999) suggests that widening bid-ask spreads are a sign of worsening liquidity.

Investor confidence in future profits is boosted by a stock split, but it is lowered by a reverse stock split. Since stock splits are corporate acts that affect the stock price, they have an effect on stock return. Following a stock split, Johnson (1966) found, stock values increased. There was a split 7.5 months, and he compares the stock price then to the price 4.5 months before the split. Three trading days after the stock split was announced, Grinblatt et al. (1984) found an abnormal return.

The effect of a dividend policy on a company's common stock is studied by many financial theories. The "dividend is irrelevant" theory, "dividend is relevant," and "optimal dividend theory" (policy) are the three theories under question. The dividend policy of a company has a significant impact on its stock price, as stated by Walter (1963). His framework is one of the oldest to show that the cost of capital must be taken into account alongside the rate of return when calculating the optimal dividend payout that maximises shareholder wealth. Francis (1972) explains the assumptions underlying Walter's model, which hold that (1) the firm supports every expense through conserved earnings, (2) the business's rate of return and cost of capital remain unchanged, and (3) every profit is either distributed as dividends or immediately invested back within the organisation. Both the company's EPS and dividend payments remain stable over time (4), and its expected lifespan (5) is very long or infinite. Ezra (1963) asserts that dividends become a passive remnant when they are treated as a funding choices, as they are in Walter's model.

The dividend policy of a company is correlated with its market value, according to a model established by Gordon (Gordon, 1962). The following conditions must hold true for Gordon's model to work: the firm is wholly owned by its shareholders and has no debt; the firm has no access to external sources of financing; the firm's internal rate of return is constant; the firm and its streams of revenue are perpetual; the suitable reduction rate is unchanged; business fees are eliminated; the stage of kept revenue stays fixed; and the cost of capital exceeds the growth rate. The dividend results from the Gordon model are comparable to those from the Walter model. Pandey (2005) explains that the two models are similar because they are based on exact similar principles.

The thesis for dividend irrelevance is most commonly attributed to Miller and Modigliani (1961). They imagine a perfect market in which the dividend policy of a company makes no difference

to its stock price. They contend that the investment policy of a company is what determines its value, and that the payout choices, which is the distribution of profits between dividend and retained earnings, is irrelevant. There are no purchases costs or buoyancy costs; there are no income taxes; the company has a fixed investment policy; and there is no risk of uncertainty, according to Francis's (1972) argument for the M and M hypothesis of irrelevance. Since dividend adjustments are cancelled out by changes in the revenue from net new securities issues, the M and M (1961) dividend indifference thesis asserts that dividend adjustments have no impact on stock valuation. Adelegan (2009) investigated the promptness and precision with which the Nigerian stock market responded to dividend announcements. The Nigeria Stock Exchange fact book, annual reports of quoted businesses, and the daily official price list were used to produce data for the years 1991-1999. The information was evaluated with the use of the Capital Asset Pricing Model (CAPM). Researchers found that for 30 days after announcing a dividend, CERs were positive and statistically significant for dividend-paying companies but negative and significant for non-dividend-paying organisations. The research showed that dividend policy was critical to the success of the Nigerian stock market, but that share prices did not move in response to dividend announcements.

According to Okpara (2010), "information asymmetry" occurs in the stock market when some investors have insider knowledge about the value of a company while other shareholders do not. The study indicated that asymmetric information had significant beneficial effects on dividend policy over the long term. Appropriate intermediary sites can be determined and selected if one is aware of the firm- and market-specific relationships that have a significant impact on fairness cost, as these proxies are more transparent and unbiased than proxies created via tampering with data. According to Kapoor (2008), the unusually high liquidity of the IT industry significantly affects the dividend policy of IT corporations. Despite annual fluctuations in revenues, corporations are extremely lucrative, enabling the payout of substantial dividends.

Uwuigbe, Olusegun and Godswill (2012) analysed thirty firms that were traded on the Nigerian Stock Exchange between 2006 and 2010. Analysts have discovered a robust correlation between stock price and earnings using ordinary least squares (OLS). It was discovered that corporate leverage, dividend payment ratios, and firm financial performance all had large impacts on Nigerian stock prices. From 2005-2009, Abdullah, Asaduzzaman, and Rashed (2013) analysed

data from 28 firms across four industries in Bangladesh to determine how dividend policy affected the market price of shares. Multiple regression and correlation analyses have found that dividend payments have a larger impact on stock prices than do dividends that are kept in-house. The statistics are consistent with Walter and Gordon's dividend policy concept. The effects of bird in the hand, catering, and signals on the bottom lines of 372 Indonesia Stock Exchange companies were evaluated by Pontoh (2013). An analysis of variance, an analysis of variance with covariance, and an independent samples t-test were used to examine the data. Additional research utilising the data-reduction method and multinomial logistic regression was undertaken to confirm the characteristics of dividend payers based on general financial parameters. The research found that dividends had a large impact on stock prices and that stock prices had a sizeable impact on dividends. The analysis assumes that dividend-paying enterprises will benefit from the signalling, bird-in-the-hand, and catering effects. This research also indicated that dividend paying companies had higher levels of outstanding shares, fixed assets, total debt, total assets, retained earnings, sales, and net income than non-dividend paying companies.

Masum (2014) analysed the performance of the 30 private commercial banks in Bangladesh that were listed on the Dhaka Stock Exchange between 2007 and 2011. The panel data performed better when fixed effects were used instead of random effects. Earnings per share, return on equity, and retention ratio all play a significant role in explaining stock price fluctuations, while dividend yield and profit after taxes play much smaller roles.

To determine how dividend decisions affected stock price changes for 15 businesses traded on the Nigerian Stock Exchange between 2003 and 2012, Sulaiman and Migiro (2015) utilised fixed and random effect models. Based on their findings, they conclude that dividend decisions impact stock price movements, earnings per share, company size, and dividend payouts to shareholders. Both dividends and earnings per share have a significant impact on the stock price. According to the results, the size of a company does not significantly affect its stock market worth. The results backed the theory that increasing dividends would improve stock value.

Ojogbo, Oke and Mustapha (2022) while writing on the influence of dividend payout ratio on share prices of quoted companies in Nigeria discovered a joint significant relationship between earning per share, dividend yield, return on investment, dividend payout ratio, retention rate and

market share prices and therefore recommends that dividend payment may not necessarily be a factor that affect market share price.

By using equity ratios such payout percentage and market book value, plus a few control variables, this study addresses a gap in the literature by examining the effect of income and dividends on stock prices in the Nigerian stock market.

METHODOLOGY

The study adopted panel data approach, to examine how stock prices and dividends were related. After trying out both fixed-effect and random-effect models on the longitudinal and cross-sectional samples, respectively, utilizing Hausman test to narrow down the options and settle on the most appropriate one. Considering longitudinal data, the consistency of company features was relied upon using the fixed impact method. By emphasising the differences inside the sample, this strategy removes bias from the data, making it statistically superior. When the features of the sample are extremely diverse, it is usual procedure to apply the Random effect approach to cross-sectional data. This strategy has been used by a plethora of authors throughout the years, including Pani (2008), Khan (2012), Oyinlola (2014), Sulaiman and Migiyo (2015), Sharifi, Ali, and Farzand (2015), Yensu and Adusei (2016), and lots more.

All 199 equities trading on the Nigerian Stock Exchange's principal exchange at the start of 2010 make up the research's demography. In 2010, 84 of the listed businesses at the time paid dividends to investors. The sample was later reduced to include only businesses that had continuously paid dividends for a period of twelve years and a total of 29 businesses qualified for the selection for the period from 2010 to 2021.

For the purpose of evaluating the impact of paying out dividends on policy stock markets, the framework relies on the conceptual assumptions presented by Walter and Gordon in 1956 and 1959. Allocation ratio, profits per share, and trade to book value are independent factors, while the price of shares is the determining factor in the present study. The size and leverage of the firm are the determinants.

The econometric models is therefore; without growth (MBV)

$$SP_{it} = \beta_0 + \beta_1POR_{it} + \beta_2EPS_{it} + \beta_3SIZE_{it} + \beta_4LEV_{it} + \mu_{it} \quad (1)$$

With growth (MBV)

$$SP_{it} = \beta_0 + \beta_1POR_{it} + \beta_2EPS_{it} + \beta_3MBV_{it} + \beta_4SIZE_{it} + \beta_5LEV_{it} + \mu_{it} \quad (2)$$

While using (POR and EPS only)

$$SP_{it} = \beta_0 + \beta_1POR_{it} + \beta_2EPS_{it} + \mu_{it} \quad (3)$$

Where SP = Stock Price, POR = Payout Ratio, EPS = Earnings Per Share, MBV = Market Book Value, SIZE = Firm Size and LEV = Leverage ; $\beta_0 - \beta_5$ are regression parameters; μ is the error term, i is the firm while t is the time period.

RESULTS AND DISCUSSION OF FINDINGS

The data obtained from the Nigeria Stock Exchange (NSE) from 2010-2021 on Stock Price (SP) , Payout Ratio (POR), Earning Per Share (EPS), Market Book Value (MBV), Firm Size (SIZE) and Leverage (LEV) in Nigeria are presented in Table 1.

Table 1: Stock Price (SP), Payout Ratio (POR), Earning Per Share (EPS), Market Book Value (MBV), Firm Size (SIZE) and Leverage (LEV) in Nigeria Stock Exchange from 2010-2021

| Year | Stock Price (SP) | Payout ratio (POR) | Earnings per share (EPS)% | Market book value (MBV)% | Firm Size (SIZE) | Leverage (LEV) |
|------|------------------|--------------------|---------------------------|--------------------------|------------------|----------------|
| 2010 | 176.1341 | 2,637.91 | 17.26 | 11.60 | 49,856.10 | 5,678.90 |
| 2011 | 236.104 | 3,797.91 | 16.94 | 8.50 | 54,612.26 | 8,087.93 |
| 2012 | 275.6257 | 5,127.40 | 15.14 | 6.60 | 57,511.04 | 9,9987.08 |
| 2013 | 337.0355 | 8,008.20 | 18.99 | 15.10 | 59,929.89 | 9,690.49 |
| 2014 | 291.8802 | 9,411.11 | 17.59 | 12.00 | 63,218.79 | 9,781.82 |
| 2015 | 361.4566 | 11,034.94 | 16.02 | 11.80 | 67,152.79 | 8,259.58 |
| 2016 | 404.9936 | 12,172.49 | 16.79 | 10.30 | 69,023.93 | 4,588.77 |
| 2017 | 455.5015 | 13,893.22 | 16.72 | 12.00 | 67,931.24 | 3,470.90 |
| 2018 | 508.693 | 15,154.64 | 16.55 | 8.00 | 68,490.98 | 4,581.74 |
| 2019 | 546.6764 | 16,238.52 | 16.85 | 8.00 | 69,810.02 | 6,122.10 |
| 2020 | 486.8033 | 18,525.22 | 16.87 | 9.60 | 68,481.79 | 6,497.75 |

| | | | | | | |
|------|--------|-----------|------|-------|-----------|----------|
| 2021 | 404.65 | 21,624.63 | 7.75 | 18.60 | 68,747.59 | 3,944.16 |
|------|--------|-----------|------|-------|-----------|----------|

SOURCES: Nigerian Stock Exchange Market (2022).

Descriptive Statistics

A summary of the results on the descriptive statistics of the study variables is presented as shown in Table 2.

Table 2: Descriptive Statistics of Variables

| Descriptive Values | Variables | | | | | |
|--------------------|-----------|---------|---------|---------|---------|---------|
| | SP | POR | EPS | MBV | SIZE | LEV |
| Mean | 3.9013 | 2.3292 | 1.2516 | 2.0157 | 0.1231 | 0.1829 |
| Median | 3.0091 | 2.3600 | 1.2312 | 2.0121 | 0.1062 | 0.1511 |
| Maximum | 4.7133 | 3.4400 | 1.5721 | 2.0330 | 0.1279 | 0.2103 |
| Minimum | 1.7830 | 2.1000 | 1.1291 | 2.0110 | 0.0912 | 0.1452 |
| Std. Dev. | 3.9219 | 2.8239 | 2.0173 | 2.1019 | 0.1728 | 0.3618 |
| Skewness | -0.7389 | -1.0066 | -1.1093 | -0.8910 | -0.2911 | -0.2910 |
| Kurtosis | 3.9102 | 3.4671 | 3.1973 | 2.1115 | 2.2190 | 3.0123 |
| Jarque-Bera | 8.7927 | 35.5945 | 12.8192 | 18.9012 | 6.7191 | 8.1022 |
| Probability | 0.1457 | 0.3221 | 0.8102 | 0.4923 | 0.2719 | 0.12091 |
| Obs | 31 | 31 | 31 | 31 | 31 | 31 |

Source: Authors' Computation (2023)

Table 2 shows the statistical characteristics of the study's variables. The mean and standard deviation, along with the lowest and highest values, are also included. The Selling Price (SP) can take on any value between \$1.7830 and \$4.7133, with \$3.9013 as the mean and \$0.8219 as the standard deviation. The 3.9219 standard deviation of the data utilised in this study indicates that the values tend to be more or less evenly distributed around the mean. If the average or standard deviation is larger than the mean, then the data is highly dispersed around the mean value. In addition, the average and standard deviation for the Payout ratio (PORminimum) are 2.3292 and 2.8239, respectively, and its minimum and maximum values of 2.1000 and 3.4400 are shown in Table 4.2. The mean and standard deviation in Table 4.2 also show a statistically significant difference from one another. Variations between the data used in the present investigation and the average value on each side can be quantified as 2.8239 standard deviations. If the average deviation is larger than the mean, then the data are extremely dispersed around the mean value.

The expected range of earnings per share (EPS) is 1.1291–1.5721, with a mean of 1.2516 and a standard deviation of 2.0713. The data used in this analysis have a standard deviation of 2.0173,

which indicates they vary from the mean value by roughly the same amount in both directions. If the standard deviation is larger than the mean, then the data are extremely dispersed around the mean value. Aside from a mean value of 2.0157, the range of possible Market Book Value (MBV) numbers is 2.0110–2.0330. There is a spread of 2.0110 - 2.0330 for this number. It is determined that MBV has a standard deviation of 2.1019. This demonstrates that the data on both sides are 2.1019 standard deviations from the mean. If the standard deviation is larger than the mean, then the data are extremely dispersed around the mean value.

Firm Size (FS) ranges from a minimum of 0.0912 to a maximum of 0.1279, with a mean and standard deviation of 0.1231, and a standard deviation of 0.1728, respectively. The following table displays the mean and standard deviation of Firm Size (FS). The data used in this analysis have a standard deviation of 0.1728, which means they vary from the mean value by that amount on both sides. If the standard deviation is larger than the mean, then the data are extremely dispersed around the mean value. In addition, the standard deviation of LEV is 0.1829, with minimum and highest values of 0.1452 and 0.2103. Leverage has a standard deviation of 0.3618. This demonstrates that the data are 0.3618 off from the mean value calculated from both perspectives. If the standard deviation is larger than the mean, then the data are extremely dispersed around the mean value.

Since the skewness values for the price of stocks (SP), the ratio of payouts (POR), market book worth (MBV), company size (SIZE), and capitalise on (LEV) are all adverse, it may be concluded that the distribution is positively skewed. This indicates that there is a preponderance of low values in the distribution. In addition, kurtosis values greater than three (3) indicate that the stock price (SP), Dividend Ratio (POR), Profits Per Share (EPS), and Market Book Worth (MBV) are all leptokurtic. Both the company's size (SIZE) and leverage (LEV) distributions are flat because both have values beneath 3. This suggests that the outliers generated by the variables are less extreme than those generated by the normal distribution. The normality test for the variable can be inferred from its Jarque-Bera values. This test lets you know if the residuals follow a typical distribution. The Jarque-Bera numbers for each parameter indicate that the residuals are normally distributed when the probability values are considered. With the aid of descriptive statistics, the researcher is able to better comprehend the nature of the investigated variables.

Tables 3 to 6 contain the findings from the stationary (unit root) test, the OLS multiple regression test, the co-integrating test, the error correction model, and the auto regression test that were discussed in this section.

Table 3: Results of Stationarity (Unit Root) Tests

| Variable | ADF Test statistic | Mackinnon's Critical Value at | | | Order of Integration | Prob. |
|----------|--------------------|-------------------------------|-----------|----------|----------------------|--------|
| | | 1%, 5% & 10% | | | | |
| | | 1% | 5% | 10% | | |
| D(SP) | -4.82901 | -3.27192 | -2.76897 | -2.61182 | I(1) | 0.0012 |
| D(PR) | -5.78384 | -3.89201 | -2.37291 | -2.89243 | I(1) | 0.0039 |
| D(EPS) | -3.72749 | -3.18973 | -2.58290 | -2.49202 | I(1) | 0.0005 |
| D(MVB) | -5.119842 | -4.532598 | -3.673616 | -3.27736 | I(1) | 0.0110 |
| D(FS) | -5.459758 | -4.532598 | -3.673616 | -3.27736 | I(1) | 0.0001 |
| D(LEV) | -5.286956 | -4.616209 | -3.710482 | -3.29779 | I(1) | 0.0005 |

Source: Authors' Computation (2023)

Initial evaluations of the study's parameters were performed using the extended Dickey Fuller test. When applied to time series data, the stationary test yields the results shown in Table 3. The table shows that the mean values of the ADF test statistics for all of the study's variables are higher than the 1%, 5%, and 10% Mackinnon critical levels. This holds true for every factor considered in the study. Since all variables have been added to order I (1), the study's findings may be used in subsequent econometric calculations.

The Ordinary Least Squares test was carried out, and the findings of which are presented in Table 4. This was done in order to determine the associations that exist in the short run, as well as the percentage of variance in the short run that can be attributed to changes in the variables that were used as predictors.

Table 4: OLS Multiple Regression Result of the Variables

| Dependent Variable: D(SP) | | | | |
|---------------------------|-------------|------------|-------------|--------|
| Method: Least Squares | | | | |
| Sample: 2010- 2021 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 8.9033 | 0.7820 | 11.385 | 0.0001 |
| D(PR) | 3.9281 | 0.6289 | 6.2455 | 0.0015 |
| D(EP) | 1.9821 | 0.7829 | 2.5317 | 0.0182 |

| | | | | |
|---------------------|---------|--------------------|---------|--------|
| D(MBV) | 2.0082 | 0.5781 | 3.4738 | 0.0051 |
| D(SIZE) | -0.8671 | 0.4672 | -1.8560 | 0.0005 |
| D(LEV) | -0.9567 | 0.3896 | -2.4556 | 0.0195 |
| R-squared | 0.5245 | Mean dependent var | | 7.9823 |
| Adj R-squared | 0.5190 | S.D. dependent var | | 0.2298 |
| F-statistic | 7.2819 | Durbin-Watson stat | | 1.7892 |
| Prob. (F-statistic) | | | | 0.0000 |

Source: Authors' Computation (2023)

It was shown that the coefficient of determination was represented by an R2 value of 0.5245, and this was shown by the results that were found in Table 4. This demonstrated that changes in the criterion variable are driven by differences in all of the explanatory variables (SP), which accounts for 52.45% of those variations. According to the findings, in the short run, the coefficients of payout ratio (POR), earning per share (EPS), market book value (MBV), company size (SIZE), and leverage (LEV) were significant and able to explain changes in the Nigerian Stock Exchange market. These variables were measured over a period of one year. The probability that f-statistics are significant at the 0.05 level (0.0000 0.5) suggests that the line of best fit is good, while the Durbin-Watson value of 1.7892 is just on the edge of what may be considered acceptable for this situation. The fact that the durbin Watson value is so close to 2 demonstrates that there is no autocorrelation present in the model. Any other number is further away from 2 than this one. The overall importance of the model is proven to be significant at the 1% level by the p-value of the F-statistics, which is 0.0000. This indicates that the probability of the F statistics is significant at the 1% level. This hints that the model might be adaptable in a useful way. According to the findings of this regression analysis, the traditionalists' anticipation that the dividend coefficient would be higher than the profits coefficient did not come true. This is because the regression found that whenever the dividend is increased by one naira (N1), the market price of shares will grow by more than 400%. The reason for this was given in the previous sentence. Furthermore, it was demonstrated that an increase in earnings of one naira (N1) will result in a rise in the market price per share that is greater than 1500% higher. This illustrates that in Nigeria, the income sources of a firm have a greater influence on the market price of its shares than do dividend payments. In other words, dividend payments are less important. The conclusion demonstrates that the traditionalist's dedication is misplaced. It's possible that this is due to the differing degrees of market efficiency that were employed for this study compared to the research that was done by traditionalists and used for that research. The

traditionalists carried out their research in established economies, which have markets that may be characterised as having a robust form of market efficiency. On the other hand, the Nigerian economy is growing, and its stock market may be characterised as having a form of market efficiency that is somewhere between robust and semi-robust.

The outcomes of the study provide further evidence that disproves the study's premise, which asserted that dividend policy does not have any influence on stock prices on the Nigerian stock market. This is due to the fact that the results demonstrated that dividend payments have a significant influence on the share price that is traded on the Nigerian Stock Exchange. The results, on the other hand, provide credence to an alternate theory which proposes that the payout ratio of the Nigerian stock market has a negligible impact on stock prices. This is owing to the fact that the results suggested that earnings rather than dividend payments had a greater influence on the market price of a company's stock, despite the fact that dividend payments have an effect on the value of a company's stock.

The findings of the study provide credence to the M-M hypothesis of irrelevance of dividend, which contends that the earning capacity of a company's assets, rather than its dividend policy, is the primary determinant of the value of the company. Despite this, M-M contends that the beneficial effects of dividend increases on stock prices should not be attributed to the payout itself but rather to the informational content of dividends with regard to future earnings. This is because M-M believes that the dividend itself is not the cause of the good impacts that dividend increases have on company prices. This is despite the fact that dividend policy does, to some extent, affect the price of a company's stock. The findings of this study are in line with those discovered by Uddin and Chowdhury (2005) as well as by Murhadi (2007).

Johansen's Co-integration Test Results

The results of Johansen Co-integration tests for all the time series variables of this study are presented in table 5.

Table 5: Results of Johansen's Unrestricted Co-integration Rank Test:

| Test (Maximum | Series | Hypothesiz ed | Eigenvalue | Max-Eigen Statistic | 0.05 Critical | Prob.** |
|------------------|--------|------------------|------------|------------------------|------------------|---------|
|------------------|--------|------------------|------------|------------------------|------------------|---------|

| Eigen Value): Obs | No. of CE(s) | | | | Value | |
|-------------------|--------------|-------------|--------|----------|---------|--------|
| 31 | D(SP) | None * | 0.9230 | 121.0201 | 69.9182 | 0.0001 |
| 31 | D(PR) | At most 1 * | 0.7923 | 49.1783 | 47.8373 | 0.0335 |
| 31 | D(EPS) | At most 2 | 0.4932 | 18.5436 | 29.8902 | 0.5011 |
| 31 | D(MBV) | At most 2 | 0.5643 | 15.9753 | 28.3589 | 0.0034 |
| 31 | D(SIZE) | At most 2 | 0.7555 | 25.8555 | 42.9152 | 0.7452 |
| 31 | D(LEV) | At most 3 | 0.1559 | 3.31704 | 25.8721 | 1.0000 |

Max-eigenvalue test indicates 2 cointegrating eqn (s) at the 0.05 level

* means the hypothesis was not supported even at the 0.05 level

** p-values according to MacKinnon-Haug-Michelis (1999)

Source: Authors' Computation (2023)

The presence of two (2) co-integrating equations is confirmed by the findings of Johansen's co-integration method, as shown in table 5 above, suggesting the existence of an important long-run link between the time series components. So then we proceed to adjust for discrepancies between the future and immediate parameters.

Error Correction Estimates

The error correction prediction was carried out to assess and adjust for discrepancies between the study's lengthy and brief run dynamics. In Table 6, you'll see the final results.

Table 6: Results of Error Correction Model

| Dependent Variable: (SP) | | | | |
|------------------------------|-------------|------------|--------------------|----------|
| Method: Least Squares | | | | |
| Sample (adjusted): 2010-2021 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 7.357357 | 0.936478 | 7.856411 | 0.0000 |
| PR | 3.24E-05 | 6.41E-06 | 5.060157 | 0.0001 |
| EPS | 1.28E-05 | 5.96E-06 | 2.150780 | 0.0471 |
| MBV | 0.055487 | 0.858211 | 0.06465 | 0.0010 |
| SIZE | -0.300232 | 0.354022 | -0.84806 | 0.0021 |
| LEV | -0.734435 | 0.310031 | -2.36888 | 0.0005 |
| ECM(-1) | -0.611201 | 0.199955 | 3.056695 | 0.0075 |
| R-squared | 0.855749 | | Mean dependent var | 9.239499 |
| Adj R-squared | 0.810671 | | S.D. dependent var | 1.110234 |
| F-statistic | 18.98360 | | Durbin-Watson stat | 1.873394 |
| Prob (F-statistic) | | | | 0.000003 |

Source: Authors' Computation (2023)

Table 6 shows at its current value of 0.611201, the ECM coefficient has the expected negative sign, suggesting that the 61.12% imbalance in the Nigerian stock market (as measured by SP) would be eliminated during the coming year. However, the coefficient of estimation (R²) of 0.855749 indicates that shifts in the study's explanatory variables explain roughly 85.58% of the time series variation in the Nigerian stock exchange market's stock price (SP). Payout ratio (PR), earnings per share (EPS), market book value (MBV), firm size (SIZE), and leverage (LEV) were all found to be significant to stock price (SP) over the long term. Stock price (SP) was positively influenced by market book value (MBV), earnings per share (EPS), and payout ratio (PR), but was negatively influenced by firm size (SIZE) and leverage (LEV). The model's quality of fit is confirmed by the ECM f-statistic of 0.000003, and the Durbin-Watson value of 1.873394 is also within acceptable ranges.

Discussions of Findings

The study's results showed that the payout ratio (PR) positively affected the stock price (SP) from 2010 to 2021. It was expected that the Payout Ratio would play a substantial role in influencing stock price and dividend policy on the Nigerian Stock Market, and this research confirmed that hypothesis. This research also found that earnings per share (EPS) has a strong beneficial effect on the stock price. Contrary to expectations, the Earnings Per Share (EPS) on the Nigerian Stock Market significantly affects stock price and dividend policy. This meant that dividend policy and stock prices on the Nigerian Stock Exchange would alter if EPS increased. The data also demonstrated a robust positive correlation between MBV and stock price. As could be imagined, Market Book Value (MBV) is a major element in setting stock prices and dividend policy on the Nigerian Stock Exchange.

This study also found a significant link between the SIZE rate of a company and its stock price. This stated that a country's stock price and dividend policy will improve with a greater number of large corporations. It was also discovered that leverage (LEV) has a significant negative effect on Nigerian stock prices. This demonstrated the negative effects of LEV on the economy, stock market, and dividend policy over the short and long terms.

CONCLUSION AND RECOMMENDATIONS

In this study, four hypotheses were tested using the unit root, cointegration, and error correction models. There was found to be a positive correlation between market book value (MBV) and dividend policy of the country, between earnings per share (EPS) and dividend policy of the country, and between the payout ratio (PR) and stock price (SP). The study also discovered that the dividend and stock market policies of a country were greatly affected by the size of the companies within that country. The analysis found, however, that Market Book Value (MBV) significantly influenced stock price and national dividend policy in a favourable direction, whereas Leverage Value (LEV) significantly influenced both in a negative one. Leverage (LEV) was found to have a new relationship with stock price, payout ratio, EPS, market book value, firm size, and leverage.

The study found that a rise in the payout ratio (PR) led to a rise in stock price (SP). It was expected that the Payout Ratio would play a substantial role in influencing stock price and dividend policy on the Nigerian Stock Market, and this research confirmed that hypothesis. This study also found that earnings per share (EPS) has a strong beneficial effect on the stock price. Contrary to expectations, the Earnings Per Share (EPS) on the Nigerian Stock Market significantly affects stock price and dividend policy. Stock prices and dividend policy on the Nigerian Stock Exchange will be affected by a growth in earnings per share. The data also demonstrated a robust positive correlation between MBV and stock price. As could be imagined, Market Book Value (MBV) is a major element in setting stock prices and dividend policy on the Nigerian Stock Exchange.

The study also discovered a significant correlation between the SIZE rate of firms and their stock prices. This stated that a country's stock price and dividend policy will improve with a greater number of large corporations. The other major finding of the study is that the level of leverage (LEV) has a significant negative effect on the level of the stock price in Nigeria from 2010 to 2021. This demonstrated the negative effects of LEV on the economy, stock market, and dividend policy over the short and long terms.

Based on the results of this study, it was recommended that maximising returns on investment is a key goal for chief executives who want to see consistent profit growth. This is due to the fact that income levels have a significant impact on the share price on the Nigerian stock market, and

therefore businesses should maintain a continuous dividend distribution to increase internal money available to pursue more successful projects that will aid increased earnings.

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