*International Journal of Business and Management Invention (IJBMI)*
*ISSN (Online): 2319-8028, ISSN (Print):2319-801X*
*www.ijbmi.org || Volume 12 Issue 1 || January 2023 || PP 49-57*

# Evaluation of Factors That Determine Changes in Dividend Policy of Pharmaceutical Sector in Nigeria

Thomas Maduabuchi Ani[1], Nwabuisi Anthony Okorie[2] andIgwe, Alex Onyeji[3]
[1,2&3]*Department of Accountancy, Enugu State University of Science and Technology, Enugu State, Nigeria*

***Abstract***
*The major goal of the research is to determine the factors influence changes in dividend policy of pharmaceutical sectors in Nigeria. It adopted research design as secondary data were used in the study. The study spanned ten years period (2011-2020). Sample of two (2) out of five (5) pharmaceutical companies for the study were used through purposive sampling technique for selection. The study adopts the historical research design which resulted in the extraction of data from secondary sources; such as audited corporate annual reports of pharmaceutical industries. Correlation statistics and regression analysis. The latter is based on firm liquidity, corporate tax, firm leverage and dividend per share. Hypotheses testing were done with correlation and regression analytical techniques using SPSS analytical software package. The result ofthe study reveals that firm liquidity and firm leverage have positive but non significant influence on dividend policy of pharmaceutical industries in Nigeria. Further findings show that while company tax has positive and significant effect on dividend policy of pharmaceutical industries in Nigeria. Consequently, it is recommended that the directors of pharmaceutical industries should consider maintain high liquidity level to pay dividend as they fall due and enhanced shareholders' confidence. Government should consider the fixed rate of company tax of 30% to enable them meet other financial commitment like dividend payout and others. This study recommends that pharmaceutical firm should be strived to payout high dividend to attract external loan and be precaution to avoid liquidation.*

***Keywords:*** *Dividend, Corporate tax, Leverage, Liquidity*

---

Date of Submission: 05-01-2023 Date of Acceptance: 18-01-2023

---

## 1. INTRODUCTION

Profit generation is one of the major characteristics of successful businesses. This profit might be used to settle debt, invest in new projects, buy additional securities, or distribute to shareholders. Financial management is concerned with the management of finances in order to achieve organizational objectives. It also raises a company's value in order to boost the value of its owners. Every business decision has financial repercussions, and any decision that affects a company's finances is a corporate finance decision. These three sorts of financial decisions should be checked by the financial management in a reasonable manner: investment decisions, finance decisions, and profit distribution decisions. As a result, when making these judgments, corporate finance is laser-focused on the end goal, which is assumed to be maximizing the company's worth (Giang and Tuan, 2016). The decision about paying dividends starts with the firm's profits; therefore, it seems logical to treat profitability as a threshold factor and a significant variable in explaining the dividend payout decision (Abdul and Muhibudeen, 2015). Thus, the payment of dividends is usually met by the company from its earnings and cash flow (Ahmed and Javid, 2009). Dividend is the distribution of profit to the shareholders. The issues that emerge when board of directors decide to distribute profit to its shareholders includes the proportion of profit to be distributed as dividend to stockholders, whether to distribute profit as cash dividend or cash be passed on toshareholders by repurchasing some shares and how smooth or stable the dividend distribution should be (Amidu & Abor, 2006).

A dividend is a payment made to a group of shareholders in the form of cash or stock and it is often paid out of a company's retained earnings; however, dividends paid out of negative retained income are feasible but uncommon. Dividend distribution dates are crucial in determining whether or not shareholders will receive dividends (Investopedia). A dividend is a payment made to a group of shareholders from a company's earnings. As long as they own the shares before the ex-dividend date, common shareholders of dividend-paying firms are usually eligible (Adam, 2020). The funds will be utilized to fund the company's current and future operations. A dividend is a small payment made to shareholders in exchange for their investment in a company's stock. It is usually paid out of the company's net profits.

Dividend policy is one of the most discussed and debated topics in modern corporate finance literature, and it remains a conundrum (Zameer, Rasool, Iqbal, & Arshad, 2013). One of the top ten unresolved issues in corporate finance literature is dividend policy (Allen, Brealey, Mohanty, & Myers, 2012). "The more we look at that image, the more it seems like a puzzle, with pieces that just don't go together," writes Black (1976). Due to differences in rules, regulations, taxation policies, and capital markets in different countries, corporations have a variety of dividend policies. A dividend policy is the framework by which a firm structures its dividend payments to shareholders. Some analysts claim that the dividend policy is theoretically pointless because investors can sell a portion of their stock or portfolio to raise cash. Because company executives are typically the largest investors, a generous dividend program will benefit them. A company's dividend policy is an important part of its overall strategy. Management must decide on the amount, timing, and a number of other factors that affect dividend distributions. According to the dividend irrelevance thesis, dividends have a small impact on a stock's price (James, 2020).

The expected dividend payout is influenced by many factors such as after tax earnings, availability of cash, shareholders expectation, expected future earnings, liquidity, leverage, return on investment, industry norms as well as future earnings. In this study, factors that influence dividend payout such as stability in debts ratio, assets growth companies, profitability and sales of the firm will be identified (John, and Muthusamy, 2010). Muhammad & Muhammad (2016) used Profitability, Firm Size, Leverage, Sales growth, Investment – opportunities, Liquidity, Business Risk and Ownership –structure as factors influence dividend policy in their study. In this study the researcher is using corporate tax, liquidity and leverage as factors that determine changes in dividend policy of pharmaceutical industries in Nigeria.

**Statement of the problem**

The most contentious aspect of corporate finance is dividend payment policy. Some researchers discovered a positive link, while others discovered a negative link. More research is needed to elucidate these links, as the results are inconsistent. The majority of dividend pay-out studies have been conducted in rich countries, with few conducted in emerging countries such as Nigeria and others. The study's major goal is to look at the elements that influence the pharmaceutical industry's dividend policy in Nigeria. The pharmaceutical sectors were chosen as the study's focus to see if corporation tax, liquidity, and leverage were factors in determining dividend distribution adjustments.

Previous studies have shown that various major elements that drive dividend policy, such as liquidity, leverage, company tax and likelihood, all play a vital role in influencing dividend policy; however, company size is also a critical component that influences dividend policy. Several corporations, in fact, choose not to release their dividends within the financial reporting period. According to research, only Glaxosmithkline and Fidson Healthcare were reported in their financial reports over the past ten years in the Nigerian pharmaceutical sector.

From another perspective, many researchers in their works examined the relationship between dividend policy and market value / shareholders wealth. Therefore, this study examined the effect of dividend policy on banks' profitability (Profit after Tax). This represents the gap which this research work attempts to fill. Hence, in an attempt not to discounting the outcome of previous studies and their mixed feelings, there is the need to provide further evidence on the evaluation of factors that determine changes in dividend policy of pharmaceutical sector in Nigeria. Therefore, this study hopes to contribute to the body of knowledge by empirically documenting the factors affecting of pharmaceutical industries in Nigeria (of such corporation tax, liquidity, and leverage) on the dividend policy.

**Objective of the Study**

The major goal of the research is to determine the factors influence changes individend policy of pharmaceutical sectors in Nigeria. The specific objectives are as follows:

1. To determine the influence of firm liquidity on the dividend policy of pharmaceutical industries in Nigeria.
2. To examine the effect of corporation tax on the dividend policy of pharmaceutical industries in Nigeria.
3. To determine the influence of firm leverage on the dividend policy of pharmaceutical industries in Nigeria.

**Statement of the Problem**

The following research questions guide the above objectives:

1. To what extent does firm liquidity influences dividend policy of pharmaceutical industries in Nigeria?
2. To what level of extent does corporation tax effects dividend policy of pharmaceutical industries in Nigeria?
3. To what degree of extent does firm leverage influences dividend policy of pharmaceutical industries in Nigeria?

**Statement of Hypotheses**

In accordance with the study's unique objectives, the researcher developed the following hypotheses:

1. Firm liquidity has non significant influence on dividend policy of pharmaceutical industries in Nigeria
2. Company tax has non significant effects on dividend policy of pharmaceutical industries in Nigeria
3. Firm leverage has non significant influence on dividend policy of pharmaceutical industries in Nigeria

## II, Review of Related Literature

### Conceptual Framework

### Firm liquidity

Many businesses' assets and investments, such as real estate, inventory, and equipment, account for a large portion of their worth. However, in order to prosper, every company needs liquidity, or easy access to funds to cover expenses and make short-term investments. Liquidity management is a set of ongoing strategies and processes that ensure your business is able to access cash as needed to pay for goods and services make payroll and invest in new opportunities that arise. Even profitable companies can fail if they don't have the cash available to pay bills (Jackson, 2019). Liquidity management refers to a strategy for satisfying your company's short-term and immediate liquidity obligations. It indicates your business is managing its assets, including cash, in order to pay all liabilities and expenses. Maintaining financial stability can also be aided by a liquidity management strategy.For treasury and finance departments, corporate liquidity management is critical. A company's ability to satisfy its obligations and even go out of business could be jeopardized if it lacks sufficient liquidity.

It measures the extent to which the assets can be converted into cash to pay firm's obligations. There is a positive association between liquidity and dividend payout. Firms maintain high liquidity level in order to pay dividends as they fall due. High liquidity level strengthens firm's ability to pay dividend thus shareholders' confidence is enhanced.

Liquidity management as it were, determine to a large extent the quantity of profit that result as well as the value of shareholders wealth (Ben-Caleb, 2008). This is because, a firm in order to survive must remain liquid as failure to meet its obligation in due time results in bad credit rating by the short term creditors, reduction in the value of goodwill in the market and may ultimately leads to liquidation (Bhavet, 2011). Hence, a good and firm financial management policy seeks to maintain adequate liquidity in order to meet its short-term maturing obligations without impairing profitability.

Cash holding has a positive effect on dividend policy because, in order to pay dividends without influencing its need in the future, such as investment and debt payment, a firm must hold a lot of cash (Lozano and Caltabiano, 2014). Cash holding is the amount of cash and equivalents held by the firm, calculated as follows: Cash Holding=Cash and Equivalent/Total Assets

### Corporate tax

Dividend policy is primarily concerned with the decisions regarding dividend payout and retention. It is a decision that considers the amount of profits to be retained by the company and that to be distributed to the shareholders of the company (Watson & Head, 2004).The amount of dividend given to shareholders is mostly determined by the firm's declared net earnings and the directors' suggestion. Dividends will not be paid if there is no profit. When a firm makes a profit, however, it is required to pay corporate tax and other statutory taxes to the government. Dividends are paid mostly after corporation taxes are deducted.

Tax is a mandatory levy imposed by the government on the income of individuals and corporations in order for the government to fulfill its social welfare and security obligations. In other terms, it is a tax levied by the government on the income, profit, or wealth of people, partnerships, and corporations (Ochiogu, 2001). One of the most important sources of revenue for all governments is corporate income tax. As a legal necessity, every corporate entity is required to pay taxes as part of its corporate obligations. Taxation has a substantial impact on portfolio investment decisions, and as a result, it has an impact on a company's dividend policy. The dividend policy of a company has an impact on the kind of shareholders it attracts. The implication is that tax increases will have a detrimental impact on the dividend received by shareholders.

### Firm leverage

Because they are successful in influencing the Company's payouts, financial leverage has an impact on dividend policy. Also, the terms that lenders impose on dividends apply to dividend distribution. The amount of external debt a company has used to finance its operations is referred to as firm leverage. The higher the leverage, the higher the dividend payout percentage. This means that, in order to attract external loans, the company's dividend payout must be increased. Firms must also take the appropriate precautions to avoid liquidation. Despite the fact that leverage is one of the most important measures of a company's financial health, it is rarely utilized to evaluate the link with the dividend pay-out ratio.The presence of debt in a company's capital structure is known as financial leverage (Pandey, 2008). It reveals the amount of debt the company has in its capital structure. The amount of fixed-income securities a corporation utilizes, such as debt and preferred equity, is referred to as financial leverage.

**Theoretical Framework**

**Signaling dividend theory**

This research is based on the signaling dividend theory, which states that management understands more about a company's future financial prospects than shareholders. According to this hypothesis, a company declaring a greater dividend than the market expects will be viewed as an indication that future financial prospects are brighter than projected. Investorsassume that the management would not have raised the dividend if they did not think thatthey could maintain it. As a result of this signal of good future prospects, investors buy moreshares, causing the share price to increase. In contrast, if the company lowers its dividend,the market sees this as a signal that the management expects bad earnings and does not thinkthey can maintain the current dividend. If raising the dividend should act as a signal, itseems reasonable to ask ourselves why the management does not only issue a declaration.Surely a declaration would be much less ambiguous then the increase of dividend. Maybemanagements think that actions speak louder than words (McLaney, 1997).

**Empirical Review**

Sajida, Irfan, Hina, and Shahid, (2020) measured those factors that affect dividend policy by considering pharmaceutical’s companies registered on PSX from 2013 to 2017. Population based on all sectors of Pakistan Stock Exchange (PSX) in which pharmaceutical’s companies taken as a sample by using census sampling technique because all companies of pharmaceutical sector were considered. Panel VAR model, fixed effect model (FAM) and also used a regression model to define the influence of independent variable on dependent variable. The results revealed that has a significant effect of managerial ownership, debt policy, ROA, firm size and free cash flow on dividend policy. The findings of this study demonstrated that the company’s future performance has more concern for the betterment investors than current revenue. There should be active focus on the future aspects in order to improve firm performance.

Funmilola, Adeniyi, & Abiodun, (2018) examined the effect of dividend policy on the profitability of selected banks in Nigeria using a time frame of 2011 to 2015. The study adopted *ex post facto* research design while the data used were extracted from the annual reports and accounts of the sampled banks. The data obtained were analysed via descriptive analysis of variables while multiple regression analysis was employed for the estimation of the model for testing the hypothesis. The result revealed that banks’ dividend payout ratio and total assets have significant effect on the profit after tax of banks in Nigeria while it was reported that banks’ dividend per share has no significant effect on their profit after tax. The study recommended that it is imperative for Nigerian banks to always find ways of increasing the percentage of distributable earnings being paid to the ordinary shareholders in the form of dividends as well as finding means of boosting their capital base in order to enhance and improve the profit after tax of the banks.

Lucky & Uzokwe, (2019)examine the validity of the irrelevant hypothesis. Tobins Q measure of market value was modeled as the function of dividend payout ratio, retention ratio, dividend per share and dividend yield. 20 firms were selected on the basis of availability of information necessary for conducting the study and the readiness of annual financial reports for the period of 10 years from 2008-2017. Cross sectional data was sourced from financial statement and annual reports of the firms. Based on the analysis of fixed and random effect results, random effect was used. The study revealed that 75 percent variation on the market value can be predicted by variation on independent variables in the regression model. The beta coefficient of the variables found that all the independent variables have positive and significant relationship with market value of the selected quoted firms. The study concludes that dividend policy is relevant as oppose to the irrelevant hypothesis of Miller and Modigliani. It’s therefore recommend that managers should manage their dividend policies effectively since it is relevant and has significant effect on market value.

Kamran, Tanveer, & Muhammad, (2019) investigates factors affecting dividend policy of non-financial food firmslisted in Pakistan Stock Exchange (PSE) by analyzing panel data of 20 non-financial firms for the period of 201to 2016. The results from fixed effect model estimation revealed (E-views) that the variables profitability,liquidity and leverage are positively and significantly related to the dividend payout, whereas business risk andgrowth opportunity are negatively and significantly related to the dividend payout. Therefore, it can be arguedthat increasing the profitability, liquidity and leverage of the firm ultimately they also increase the dividendpayment to shareholder. The study provides valuable information to the Board of Directors for formulating andreviewing the dividend policy, taking into account the factors that have been shown to have a significant impacton the dividend payout. In particular, if the Board of Directors considers increasing the dividend payment toshareholders, the factors of profitability, leverage, liquidity, growth opportunity and business risk must becarefully considered.

Geetanjali, and Shailesh (2019) determined whether a firm's dividends are influenced by the sector to which it belongs. This paper also examines the explanatory factors for dividends across individual sectors in India. This longitudinal study uses balanced data consisting of companies listed on the National Stock Exchange (NSE) of India for 12 years—from 2006 to 2017. Pooled ordinary least squares (POLSs) and fixed effects panel models are used in our estimation. We find that size, profitability, and interest coverage ratios have a significant positive relation to dividend policy. Furthermore, business risk and debt reveal a significantly negative relation with dividends. The findings on profitability support the free cash flow hypothesis for India. However, we also found that Indian companies prefer to follow a stable dividend policy. As a result of this, even firms with higher growth opportunities and lower cash flows continue to pay dividends. We also find evidence that dividend policies vary significantly across industrial sectors in India. The results of this study can be used by financial managers and policymakers in order to make appropriate dividend decisions. They can also help investors make portfolio selection decisions based on sectoral dividend paying behavior.

Rukaiyat (2019) investigates dividend decision in 299 companies listed in Nigeria on Nigerian stock exchange market. This paper compares dividend decisions in the pre-crisis, crisis and post-crisis periods. Six possible determinants of dividend policy were analyzed using correlation and multiple regression analysis for a period of 13 years (2002 to 2014). The companies are segregated into active and dead groups for the purpose of the analysis. This paper contributes to the current body of knowledge by giving more insights to dividend policy in the largest economy in Africa taking account of the financial crisis of 2008. Liquidity and growth opportunities are common predictors in the three periods. Results are in support of agency, pecking order and signalling theories. The predictors in the regression model explains 42% variability in dividend policy before the crisis in Nigeria but about 20% during and afterward

Amir, Mir & Adel (2017) examined the factors affecting dividend policy based on panel data method of listed firms on Tehran Stock Exchange. For this reason, firms listed on Tehran Stock Exchange during the years 2009 to 2014, with systematic deletion method and by considering inherent limitations in this field have been screened, and the numbers of remaining firms to test research hypotheses were 106 firms in terms of 630 observations. The results showed that, the current ratio and financial leverage have a significant and reverse effect on dividend policy in listed firms on Tehran Stock Exchange. Profitability variable has a positive and significant impact on dividend policy in listed firms on Tehran Stock Exchange, and firm size variable doesn't have a negative and significant impact on dividend policy on listed firms on Tehran Stock Exchange.

Muhammad&Muhammad (2016) investigate the determinants of dividend payout of Oil and Gas industry of Pakistan using secondary data from published annual reports from 2008 to 2014 listed on KSE (Karachi Stock Exchange). Dividend payout can be affected by profitability, firm size, financial leverage, sales growth, investment opportunities, liquidity, business risk, and ownership structure. Panel data technique used due to panel characteristics of available data with ordinary least square regression model to find out the impact of set of explanatory variables on the dividend payout using the Stata. Financial leverage, sales growth and business risks are the most significant variables of the study where financial leverage and business risk have significant negative effect on dividend payout while sales growth has favorable positive impact on dividend payout. Results revealed significant positive link of profitability and firm size with dividend payout whereas government ownership is negatively associated with dividend payout. Investment opportunities, liquidity and managerial ownership showed insignificant relationship with dividend payout. This Suggests that dividend payout policy is dependent on business strategies including both investment and financing decisions. Financial managers should consider these factors while formulating dividend policy of the firm.

Sunday, Ajibola & Tobechi (2015)examined the determinants of dividend policy decisions of twenty-five non-financial firms listed on the Nigerian Stock Exchange between 1997 and 2011. Panel data methodology was employed, while fixed and random effects models were used as estimation techniques. Result reveals that profitability, firm size, leverage and changes in the dividend payout are significant factors that affect dividend policy decisions of the sampled firms during the period of the study. It is hereby recommended that profitability, size, leverage and changes in dividend payout should be considered by Board of Directors of listed firms in Nigeria when designing their dividend payout policy decisions. The outcome of this study lends support for profitability, agency cost and signaling hypotheses of dividend policy.

Tahere, & Batool, (2014) investigated factors influencing corporate dividend policy of financial and non-financial firms on companies listed in Tehran stock exchange. For this purpose, dividends payable as variable dividend policy alternatives were considered. Empirically the research data is collected from 70 firms in the Tehran Security Exchange (TSE) during 2009-2013 using the RA software and the site of the Tehran Stock Exchange were collected. Multiple regressions technique is used for examining the stated hypotheses. The results indicate that the variable size and liquidity of the company has a significant positive impact on the dividend is payable. Therefore, it can be argued that increasing the size and liquidity of the company paying the dividends by companies to increase.

## III. Methodology

**Research Design**

The study was conducted using a historical research design. The historical research methodology was chosen because it will assist us in developing a plan that would allow us to elicit information on past events, allowing us to use the appropriate econometric data analysis methods (Onyekwelu, 2015). The study examines the elements that influence changes in the pharmaceutical sector's dividend policy in Nigeria. It was carried out at a few Nigerian pharmaceutical companies. This study used secondary data from pharmaceutical companies in Nigeria and released audited annual financial reports over a ten-year period. The study's population included all pharmaceutical companies listed on the Nigerian Stock Exchange as of December 31, 2020. There are six companies in all. Purposive sampling strategies were used to pick two (2) pharmaceutical companies that have consistently shown their payout dividend in their financial reports. With the use of SPSS software, the data for the study were analyzed using diverse techniques, such as a correlation and a regression model.

**Model Specification**

The proxy for dividend policy is dividend per share.
The following model will be used to evaluate the study:
DPS = f(FLQ, CTX,FLEV, FZ)…………………………….(1)
DPS = dividend per share
FLQ = Firm liquidity
CTX = Corporate tax
FLEV = Firm leverage
FZ = Firm Size (control variable)
In linear regression form, it will become:
$DPS_{it} = \beta_o + \beta_1 FLQ_{it} + \beta_2 CTX_{it} + \beta_3 FLEV_{it} + \beta_4 FZ_{it} + \mu$ ……………. (2)
$\beta_{o\,=}$ Constant Term
$\beta_1 FLQ_{it}$ = Coefficient of Firm Liquidity
$\beta_2 CTX_{it}$ = Coefficient of Firm Corporate Tax
$\beta_3 FLEV_{it}$ = Coefficient of Firm Leverage
$\beta_4 FZ_{it}$ = Coefficient of Firm Size (control variable)
$\mu$ = Error Term

**Decision Rule:**

Reject the null hypothesis if t-statistics is greater than 2.0 and the P- value is less than 5% otherwise accept the null hypothesis.

## IV. Data Presentation and Analysis

**Data Analysis**

The raw data collected from the selected pharmaceutical were analyzed using descriptive statistics and regression analysis. The results are presented in tables one and two below.

**Data Presentation**

The raw data on dividend per share, firm liquidity, corporate tax, firm leverage and firm size collected from the selected pharmaceutical were presented below

**Table 1:** Data on dividend per share, firm liquidity, corporate tax, firm leverage and firm size

| FIRMS | YEARS | DPS (=N=) | FLQ (=N=) | CTX (=N=) | FLEV (=N=) | FZ (=N=) |
|---|---|---|---|---|---|---|
| GSK | 2020 | 0.40 | 1.31 | 377,992 | 0.61 | 18,734,558 |
| | 2019 | 0.55 | 1.11 | 252,227 | 0.50 | 23,735,822 |
| | 2018 | 0.50 | 2.16 | 542,435 | 0.44 | 15,700,216 |
| | 2017 | 0.40 | 2.55 | 637,836 | 0.56 | 26,286,191 |
| | 2016 | 0.30 | 2.27 | 2,192,254 | 0.40 | 27,981,229 |
| | 2015 | 0.30 | 1.30 | 192,467 | 0.41 | 31,121.864 |
| | 2014 | 0.25 | 1.07 | 903,374 | 0.48 | 27,789.038 |
| | 2013 | 1.30 | 1.08 | 1,395,659 | 0.46 | 26,022,153 |
| | 2012 | 1.20 | 1.50 | 1,315,825 | 0.38 | 21,571,268 |
| | 2011 | 1.20 | 1.42 | 1,136,892 | 0.41 | 17,719,379 |
| FIDSON | 2020 | 0.20 | 0.12 | 567,763 | 0.40 | 27,242,488 |
| | 2019 | 0.15 | 0.02 | 168,478 | 0.32 | 20,327,151 |
| | 2018 | 0.15 | 0.19 | 258,314 | 0.57 | 20,483,325 |
| | 2017 | 0.20 | 0.14 | 517,758 | 0.60 | 17,446,718 |
| | 2016 | 0.05 | 0.15 | 127,025 | 0.60 | 16,666,935 |
| | 2015 | 0.05 | 0.66 | 93,661 | 0.71 | 16,670,325 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 2014 | 0.05 | 0.80 | 238,987 | 0.62 | 15,772,494 |
| | 2013 | 0.15 | 1.15 | 94,611 | 0.35 | 12,243,088 |
| | 2012 | 0.10 | 1.85 | 333,191 | 0.36 | 10,780,936 |
| | 2011 | 0.12 | 2.13 | 158,674 | 0.32 | 9,415,064 |

**Source:** ResearcherCompiled from annual report of GlaxoSmiths and Fidson Healthcare plc

**Table 2:**Pearson Correlation Matrix

| | DPS | FLQ | CTX | FLEV | FZ |
|---|---|---|---|---|---|
| DPS | 1.000 | .257 | 0.602 | -0.222 | 0.312 |
| FLQ | 0.257 | 1.000 | 0.386 | -0.310 | -0.043 |
| CTX | 0.602 | 0.386 | 1.000 | 0.233 | 0.398 |
| FLEV | -0.222 | -O.310 | -0.233 | 1.000 | 0.123 |
| FZ | 0.312 | -0.043 | 0.398 | 0.123 | 1.000 |

***Source:*** SPSS 20: Correlation output, 2020

The study discovered a positive correlation coefficient between FLQ, CTX, FZ, and DPS by correlation factors of 0.257, 0.602, and 0.312, respectively, based on the findings of the correlation analysis in table 1. FLEV and DPS, on the other hand, were discovered to have a negative association, with correlation coefficients of -0.222.

**Table 2:** Summary ofmultiple regression on firm liquidity, corporate tax, firm leverage and firm size on pharmaceutical companies in Nigeria

| Variables | B | Beta | T | P-Value | Adj $R^2$ | F-Value |
|---|---|---|---|---|---|---|
| FLQ | .130 | .252 | 1.126 | .275 | .215 | 2.304 |
| CTX | 4.290E-007 | .602 | 3.199 | .005 | .327 | 10.237 |
| FLEV | -.763 | .222 | -.964 | .348 | -.0.004 | .930 |
| FZ | 1.561E-008 | .120 | .516 | .181 | .047 | 1.941 |

***Source:*** SPSS 20: Regression output, 2020

**Test of Hypothesis one:** Firm liquidity has non significant influence on dividend policy of pharmaceutical industries in Nigeria.

Firm liquidity has positive and non significant influence on dividend policy of pharmaceutical industries. According to decision rule, reject the null hypothesis if t-statistics is greater than 2.0 and the P- value is less than 0.05 otherwise accept the null hypothesis. In table 2 t-statistics is less than 2 and the P-value is more than 0.05 meaning that alternative should accept (t =1.126; p-value =0.275). 0.215 is the adjusted R-squared. This suggests that firm liquidity could account for around 21.5% of dividend policy variances, while other factors not addressed in this study could account for 78.5% of dividend policy variations.

**Test of Hypothesis two:** Company tax has non significant effects on dividend policy of pharmaceutical industries in Nigeria.

Given the decision rule to reject the null hypothesis if t-statistics is greater than 2.0 and the P- value is less than 5% otherwise accept the null hypothesis.

Table 2 shows that t-statistics of company tax as 3.199 >2.0 with a P-value 0.005 < 0.05. We thereby reject the null hypothesis ($H_0$). Conclude company tax has positive and significant effect on dividend policy of pharmaceutical industries in Nigeria. 0.327 is the adjusted R-squared. This suggests that company tax could account for around 33% of dividend policy variances, while other factors not addressed in this study could account for 67% of dividend policy variations.

**Test of Hypothesis three:** Firm leverage has non significant influence on dividend policy of pharmaceutical industries in Nigeria.

Given the decision rule to reject the null hypothesis if t-statistics is greater than 2.0 and the P- value is less than 0.05 otherwise accept the null hypothesis.

In table 2, t-statistics of firm leverage as -0.964 < 2.0 with a probability of 0.348 > 0.05. We accept null hypothesis. According to table 2, firm leverage has positive and non significant influence on dividend policy of pharmaceutical industries in Nigeria. -0.004 is the adjusted R-squared. This suggests that firm leverage could account for around -0.4% of dividend policy variances, while other factors not addressed in this study could account for 99.96% of dividend policy variations.

## IV. Discussion of Findings

According to table 2, firm liquidity has positive and non significant influence on dividend policy of pharmaceutical industries. This disagreed with study of Kamran, Tanveer, & Muhammad, (2019) and Tahere, & Batool, (2014) showed that liquidity has positive and significant related to the dividend payout.

Second finding also shows that company tax has positive and significant effect on dividend policy of pharmaceutical industries in Nigeria.

Firm leverage has positive and non significant influence on dividend policy of pharmaceutical industries in Nigeria. A study conducted bySunday, Ajibola & Tobechi (2015) and Amir, Mir & Adel (2017) agreed that leverage is a significant factor on dividend policy that disagrees with findings in table 2.

## V. Summary of Findings

The summary of findings for this study includes the following:

1. Firm liquidity has positive and non significant influence on dividend policy of pharmaceutical industries in Nigeria.
2. Company tax has positive and significant effect on dividend policy of pharmaceutical industries in Nigeria.
3. Firm leverage has positive and non significant influence on dividend policy of pharmaceutical industries in Nigeria.

## VI. Conclusion

The study determined the factors influence changes in dividend policyof pharmaceutical sectors in Nigeria.This study has contributed to the research effort at empirical measure of the factors influence changes on dividend policy of pharmaceutical firms. Panel data were sourced from the annual reports and accounts of the sampled firms. Inferential statistics using correlation analysis and multiple regressions were employed via SPSS 20.0 statistical software. Data analysis revealed that a relationship exists between factors influence changes and dividend policy of pharmaceutical firms. As disaggregated components, firm liquidity, company tax and firm leveragemixed a significant influence on dividend policy at 5% significant level.

**Recommendations**

The following recommendations were made in line with the findings and conclusion of this study:

1. The directors of pharmaceutical industries should consider maintain high liquidity level to pay dividend as they fall due and enhanced shareholders' confidence.
2. Government should consider the fixed rate of company tax of 30% to enable them meet other financial commitment like dividend payout and others.
3. This study recommends that pharmaceutical firm should be strived to payout high dividend to attract external loan and be precaution to avoid liquidation.

## References


[1]. Abdul, A. and Muhibudeen, L. (2015). Relationship between dividend payout and firms'performance: Evaluation of Dividend Policy of Oando Plc. International Journal of Contemporary Applied Sciences, 2(6).

[2]. Adam, H. (2020). What is dividend? https://www.investopedia.com/terms/d/dividend.asp

[3]. Ahmed, H. and Attiya, J. (2009). Dynamics and determinants of dividend policy in Pakistan (Evidence from Karachi Stock Exchange Non Financial Firms. International Journal of Finance and Economics. 25, 148-171.

[4]. Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. The Journal of Risk Finance, 7(2), 136-145

[5]. Amir, M. H., Mir, F. M & Adel, S. V. (2017). Investigate the factors affecting dividend policy in listed firms on Tehran Stock Exchange. IOSR Journal of Economics and Finance (IOSR-JEF) 8(2,) 60-62, www.iosrjournals.org

[6]. Ben-Caleb, E. (2009). Working Capital Management and Profitability of Listed Companies in Nigeria: Nigeria Research Journal of Accountancy; 1 (1) 44-57

[7]. Bhavet (2011) Management of liquidity- A case study of Tisco Ltd. International Journal of Research in IT & Management 149 IJRIM 1(2) (ISSN 2231-4334)

[8]. Black, F. (1976). The dividend puzzle. The Journal of Portfolio Management, 2(2), 5-8.

[9]. Brealey, R. A., Myers, S. C., Allen, F., & Mohanty, P. (2012). Principles of corporate finance. India: Tata McGraw-Hill Education.

[10]. Funmilola, Y. O., Adeniyi, A. A., & Abiodun, O. S. (2018). Dividend policy and banks' profitability in Nigeria. Nile Journal of Business and Economics,10: 52-68 http://journal.nileuniversity.edu.ng/index.php/NileJBE

[11]. Geetanjali, P and Shailesh R (2019). Sectoral Analysis of Factors Influencing Dividend Policy: Case of an Emerging Financial Market.Journal ofRisk and Financial Management,12, 110; 1-18, www.mdpi.com/journal/jrfm

[12]. Giang, N. T. and Tuan, D. A. (2016). Financial Performance, dividend payment and firm value: an exploratory research on vietnam listed firms in the food and drink industry. VNU: Journal of Science: Economics and Business, 32(2), 47 – 57

[13]. Investopidia https://www.investopedia.com/terms/d/dividend.asp

[14]. Jackson,N. M. (2019). Liquidity management: what it is and why it's important https://www.bbvausa.com/business/

[15]. James, C. (2020). Dividend policy. https://www.investopedia.com/terms/d/dividendpolicy.asp

[16]. John, F. and Muthusamy. (2010). Leverage, growth and profitability as determinants of dividend payout ratio-evidence from Indian paper industry. Asian Journal of Business Management Studies, 1(1), 26–30.

[17]. Lozano, M. B & Caltabiano, S. (2014). Cross institutional cash holding and dividend policies: Focusing on Brazilian Firms. Journal of Applied Economics. 47.

[18]. Lucky, A. L, & Uzokwe, G. O. (2019). Dividend policy and value of quoted firms in Nigeria: A Test of Miller and Modigliani Irrelevant Hypothesis Australian Finance & Banking Review; 3 (2)

[19]. McLaney, E. J.(1997). Business Finance: Theory and Practice, 4th ed, London, Pitman Publishing.

[20]. Muhammad, T & Muhammad, M. (2016). Determinants of dividend payout: evidence from listed oil and gas companies of Pakistan. Journal of Asian Finance, Economics and Business, 3 (40) 25-37, doi:10.13106/jafeb.

[21]. Ochiogu, T. O (2001). Determinants of corporate dividend policy: A factorial analysis. Financial Review, 28, 523-47.
[22]. Onyekwelu, U. L (2020). Firm foundation in accounting and finance research. (Rev ed), Enugu, His Glory Publications.
[23]. Pandey I. M (2008). Financial management. Vikas Publishing, New Deihi
[24]. Rukaiyat A. Y (2019). Factors influencing dividend payout policy of firms listed on the Nigerian Stock Exchange, Advances in Economics and Business 7(6): 256-265, www.hrpub.org
[25]. Sajida G, Irfan U, Hina, G and Shahid, R (2020). Factors affecting dividend policy: empirical study from pharmaceutical's companies in Pakistan (PSX), EJBMR, European Journal of Business and Management Research 5(5),
[26]. Sunday O. K, Ajibola A. D & Tobechi F. A (2015). Factors influencing dividend payout policy decisions of Nigerian listed firms International Journal of Economics, Commerce and Management United Kingdom III (6), http://ijecm.co.uk/
[27]. Tahere, S & Batool, Z (2014). The study factors influencing corporate dividend policy of
financial and non-financial firms on companies listed in Tehran Stock Exchange Research Journal of Finance and Accounting, 5 (21), www.iiste.org
[28]. Watson, D. & Head, A. (2004). Corporate Finance: Principles & Practice. 3rd Edition. Essex: Pearson Education Ltd.
[29]. Zameer, H., Rasool, S., Iqbal, S., & Arshad, U. (2013). Determinants of dividend policy: A case of banking sector in Pakistan. Middle-East Journal of Scientific Research, 18(3), 410-424.
[30]. Kamran, U, Tanveer, B & Muhammad, A (2019). Factors affecting dividend policy: an empirical investigation of food sector of PakistanResearch Journal of Finance and Accounting, 10 (5).www.iiste.org.

Thomas Maduabuchi Ani. "Evaluation of Factors That Determine Changes in Dividend Policy of Pharmaceutical Sector in Nigeria." *International Journal of Business and Management Invention (IJBMI)*, vol. 12(1), 2023, pp. 49-57. Journal DOI- 10.35629/8028