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ABSTRACT

**RESEARCH ARTICLE** 

# Determinants of Dividend Policy in Foods and Beverages Manufacturing Firms in Nigeria

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The realization corporate goals of entrepreneurial investment by manufacturing firms in Nigeria has been inhabited by lack of sufficient funds and lack of access to capital. This lowers the firms' financial leverage leading to low level of investment, low production and liquidity problems. This coupled with the high rate of corporate income tax in the country resulted in poor earnings and zero or residual dividend policy in most of the firms. This prompted the study to examine the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria. The specific objectives of the study are: explore the effect of earnings per share on dividend per share; ascertain the effect of liquidity on dividend per share; evaluate the effect of financial leverage on dividend per share; and appraise the effect of corporate income tax on dividend per share of foods and beverage manufacturing firms in Nigeria. A sample of 5 firms was selected from the population of 15 foods and beverage manufacturing firms listed on the Nigerian Stock Exchange during the period from 2011 to 2020. The data extracted from the financial statements of the selected firms were analyzed using multiple regression analysis. Findings suggest that earnings per share, liquidity and leverage positively and significantly determine the dividend policy of foods and beverage manufacturing firms in Nigeria. Findings further shows that corporate income tax negatively and significantly determines the dividend policy of the firms. Based on these findings, the study recommends that foods and beverage manufacturing firms in Nigeria should increase their profitability and repurchase their share floating on the stock exchange to boast dividend payment to their shareholders. Repurchased shares increase firm value and enable firm owner consolidate ownership of their firms. Also, the firms should increase their liquidity by investing in shirt term assets and also by regularly monitoring their liquidity positions. It was further recommended that each firm should locate its optimal capital structure and use debt financing up to the optimal point. Finally, the firms should engage tax consultants that will advise them on tax matters from time to time, this will assist the firms reduce tax liability and boast their dividend policy.

Keywords: Determinants of Dividend Policy; Foods and Beverages Manufacturing Firms; Nigeria

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#### Introduction

Firm managers are faced with the challenge of choosing between the distribution of profit generated by a firm to shareholders as dividend and the retention of such profit in the business for reinvestment for future growth. Because of this reason, dividend policy remains one of the most debated topics and a core theory of corporate finance which still keeps its prominent place. Many theories and empirical evidences have been presented on dividend policy, but the issue is yet unresolved and still open for further discussion. Thus, dividend policy is among the top ten unresolved problems in finance literature without adequate explanation for the observed dividend behavior of firms (Brealay & Myers, 2015). One important fact that is glaring is that since after the economic meltdown, investors have started to desire high current dividends to meet their socio-economic needs. This was the consequence of the meltdown and also the collapse of some big firms around the world which paint picture of future uncertainty (Michael, 2011). Dividend decisions are important because they determine what funds flows to investors and what funds are retained by the firm, moreover, it provides information (signal) to stakeholders concerning the firm's performance (Ross, Westerfield, & Jaffe, 2002).

Anita & Yulianto (2016) describe dividend policy as a decision whether the profit of a firm would be distributed to shareholders as dividends or retained in the business to finance investment in the future. It could also be seen as a decision to determine how much of the firm's income would be distributed to shareholders as dividend and how much to be retained in the firm for reinvestment for future growth. Ali (2013) opines that dividend policy remains one of the most important financial policies not only from the viewpoint of the firm, but also from that of the other stakeholders including, the shareholders, the consumers, employees and the regulators. For a firm, it is a pivotal policy around which other financial policies rotate. Gill, Biger & Tibrewala (2010) also state that dividend payout attractive investors looking to secure current income. It also helps to maintain market price of a firm shares in the stock market. Firms with long standing history of stable dividend payouts would be negatively affected by lowering or omitting dividend distributions. On the other hand, firm would be positively affected by increasing dividend payouts or making additional payouts because this sends a positive signal to the market about the firms. Firms without a dividend history are generally viewed favorably when they declare new dividends.

A scan through available literature shows that various studies have in the past examined the factors influencing the dividend behavior of firms. For instance, Bogna (2015) adopted profitability, liquidity, firm size and financial leverage as possible factors influencing dividend policy in Poland. Also, Pinto & Rastogi (2019) used firm size, profitability, financial leverage and interest coverage ratios as determinants of dividend policy in emerging financial market of India. Jovković, Vasić & Bogićevic (2021) adopted profitability, liquidity, leverage, firm growth, previous year dividend and firm size as possible determinants of dividend policy in the banking sector of Serbia. In Nigeria, Odesa & Ekezie (2015) states that investment opportunity, profit, total debts, return on equity, structure of shareholders and last paid dividend are among the determinants of dividend policy in manufacturing sector of Nigeria. This study, however, adopted, firm earnings, liquidity, financial leverage and corporate income tax as possible determinants of dividend policy in Nigeria.

Tuovila (2021) defines earnings as an after-tax net income which is the company's bottom line and the single most important and most closely studied number in a firm's financial statements. Tahu & Susilo (2017) defines liquidity as the ability of a company to meet its financial obligations that must be met immediately. Gill, Biger & Tibrewala (2010) describes leverage as a financial ratio that indicates the relative proportion of equity and debt used to finance a company's assets. This ratio is also known as risk, gearing or leverage. Hayes (2021) defines leverage as the proportion of debts in a firm's capital structure. Leverage results from using borrowed capital as a funding source when investing to expand the firm's asset base and generate returns on risk capital. Kegan (2021) describes The taxes are paid on a company's taxable income, which includes revenue minus cost of goods sold (COGS), general and administrative (G&A) expenses, selling and marketing, research and development, depreciation, and other operating costs. Lumapow & Tumiwa (2017) state that dividend payout ratio is the ratio of the total amount of dividends paid out to shareholders relative to the net income of the firm. It is the percentage of earnings paid to shareholders via dividends.

# **Statement of the Problem**

Dividend policy is a decision whether the profit of a firm will be distributed to shareholders as dividends or retained in the business to finance investment in the future. It is a decision as to how much of a firm's profit for the year will be distributed to shareholders as dividend and how much to be retained in the firm for future growth and expansion. A firm with aggressive dividend policy increases dividend payout to shareholders which in turn leads to higher stock price and may attract more investors to the firm. A passive dividend policy on the other hand, reduces dividend distribution to shareholders and ensures that more funds are available for continuous investment in asset for future growth and expansion of the firms. The type of dividend policy that a firm will purse depends on the economy where the firms operate and also the circumstances of the firms.

However, the realization of corporate goals of entrepreneurial investment by manufacturing firms in Nigeria has been inhibited by lack of sufficient funds. This lack of access to capital lowers the firms' financial leverage leading to low level of investment, low production and liquidity problems. This coupled with the high rate of corporate income tax in the country resulted in poor earnings and zero or residual dividend policy in most of the firms. The zerodividend policy in turn discourages investors from investing in the sector resulting in the collapse and eventual extinction of some of the manufacturing firms in recent times. This development prompted the current study to examine the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria.

# **Objectives of the Study**

The main objective of the study is to examine the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria. The specific objectives are to:

- i. Explore the effect of earnings per share on dividend per share of foods and beverage manufacturing firms in Nigeria.
- ii. Ascertain the effect of liquidity on dividend per share of foods and beverage manufacturing firms in Nigeria.
- iii. Determine the effect of financial leverage on dividend per share of foods and beverage manufacturing firms in Nigeria
- iv. Appraise the effect of corporate income tax on dividend per share of foods and beverage manufacturing firms in Nigeria.

#### **Research Questions**

The study adopted the following research questions for the purpose of the study.

- i. What is the effect of earnings per share on dividend per share of foods and beverage manufacturing firms in Nigeria?
- ii. How does liquidity affect dividend per share of foods and beverage manufacturing firms in Nigeria?
- iii. To what extent does financial leverage affect dividend per share of foods and beverage manufacturing firms in Nigeria?
- iv. What is the effect of corporate income tax on dividend per share of foods and beverage manufacturing firms in Nigeria?

# **Statement of Hypotheses**

The following null hypotheses were formulated to address the research questions:

- i. Earnings per share does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.
- ii. Liquidity does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.
- iii. Financial leverage does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.
- iv. Corporate income tax does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

#### **Review of Related Literature**

#### **Conceptual Review**

# **Dividend Policy**

Sartono (2011) defines dividend policy as a decision about whether to distribute the profits made by a firm as dividend to shareholders or keep it to be reinvested into the firm for future growth and expansion. Emekekwue (2014) states that the essence of the dividend policy is to determine what portion of firms' earnings that will be paid out as dividend or held back as retained earnings. Therefore, dividend policy is the regulations and guidelines on the amount of cash that a company sends to its shareholders in the form dividends. Emeni & Ogbulu (2015) also affirm that the main concern of a dividend policy decision is about how much incomes can be paid as dividend by the company and how much could be reserved.

In Nigeria like in other countries, dividend policies are determined by board of directors while the legal restrictions are found, in the yearly Income Policy Directives, the Company Income Tax Act 1978 and Company Allied Matters Act 1990 among many others (Dada' and Awoyemi,2015). For instance, Section 380(b) of CAMA 1990 allows a company to pay dividends out of revenue reserves that is profit of the previous years which has not been distributed. Section 380(c) of CAMA 1990 allows as distributable, profits arising from the sale of a fixed asset, Section 381 of CAMA 1990 provides that a company may only declare or pay dividend if there are reasonable grounds for believing that the company is or could after the payment be able to pay its liabilities as they become due (Emekekwue, 2014).

Onuigbo (2012) identifies the various types of dividend policy as fixed dividend policy, progressive dividend policy, residual dividend policy and zero dividend policy. A fixed policy is where the firm pays out a particular fixed amount of its profit for the year as dividend. Copeland (2004) states that this type of policy allows the shareholders the opportunity to clearly know the amount of dividend to expect from their investment. Under the progressive policy, dividend is pay on a steady and a progressive rate usually in line with inflation. Every effort is made to sustain the increase even though marginal. Under the residual policy, dividends are just what is left after the firm determines the retained profits required for future investment. Thus, dividend becomes a circumstantial payment only paid when the investment policy is satisfied. Weston & Copeland (2004) opines that in these cases, some firms may decide not to pay dividend at all. This is especially new firms that rather require capital to execute its projects. In that case, all profit is retained for expansion of the business. Investors who prefer capital gain to dividend because of taxation will naturally be lured by zero dividend policy.

# **Dividend Per Share**

The dividend payout ratio is the amount of dividends paid to stockholders relative to the amount of total net income of a company. The amount that is not paid out in dividends to stockholders is held by the firm for growth. The amount that is kept by the company is called retained earnings.

Enekwe et al. (2015) asserts that dividend payout ratio is measure the percentage of dividend a company pays out relative to its earnings per share. The payout ratio is used in fundamental analysis to determine whether a firm could continue paying dividends to its shareholders. The amount that is not paid out in dividends to stockholders is held by the company for growth. The amount that is kept by the company is called retained earnings. Barron (2002) says that dividend pay-out is important to shareholders and potential investors in showing the earnings that a firm is generating. Healthy dividends pay-outs thus indicate that firms are generating real earnings rather than cooking books.

Lee & Mauck (2016) state that dividend pay-outs may function as a signal of a company's financial health, with an increase in dividends indicating that managers expect their business to have a higher cash flow in the future. Consequently, a higher value is signaled by higher dividends. Another major reason is that cutting dividends is often associated with a company having financial difficulties, therefore a dividend cut would likely lead to the market assuming there is trouble and inevitably start generating uncertainty. Dividend payout ratio is given by the formula:

Dividend Per Share = Dividend Paid Out Number of Shares Outstanding

# **Firm Earnings**

Sartono (2001) describes earnings or firm profitability as the ability of a firm to obtain profit in relationship with firm sales, total assets and funds. Profitability is required to assess the potential changes of economic resources which may be controlled in the future. A good prospect will attract investors to invest in the company. Amidu & Abor (2006) asserts that profit is the single most important factor in a firm's financial statement and it has been widely used in previous studies in order to determine the relationship with the firm's dividend payout ratio. Most previous studies have found a positive relationship between profit and the firm's dividend payouts irrespective of the fact that many different measurements have been used in order to measure profit, including return on assets, return on equity, earnings per share, net profit margin and profit for the year. Alkuwari (2009) states that return on equity is one of the best measurements of the company's profit since it reveals the capacity of generating cash internally

Brigham & Houston (2009) state that firm earnings or profitability also is the end result of a number of policies and decisions of the management of a firm. Firms that have a high level of profitability each year, have a tendency to declare dividend than firms that are operating with little or no profit.

# **Firm Liquidity**

Harmono (2014) describes liquidity as a firm's ability to pay off its short-term debt, generally within less than one year. The most common used liquidity ratios include: current ratio, quick ratio, cash ratio, and net working capital to total assets ratio. The liquidity reflects management performance measures in terms of the extent to which the management is able to manage working capital, funded from current debt and cash balances of the company. Management negligence has been identified as the major cause of a firm's inability to settle short term business obligations as they fall due. A firm that constantly uses liquidity ratios to monitor its liquidity level, will always know its liquidity position long enough and take steps to address adverse liquidity condition before it gets out of hand. The ability of a firm to declare and pay dividend depends on the liquidity condition of the firm. Ho (2003) asserts that liquidity condition of a firm affects dividend decisions of the firm. Firms with higher cash availability are more likely to pay dividends than firms with insufficient level of cash. Therefore, the likelihood that a firm will pay cash dividends is positively related to the firm's liquidity. This positive relationship is supported by the signaling theory of dividend policy.

# **Financial Leverage**

Hellström & Inagambae (2012) state that the financial leverage corresponds to the level of debt relative to the level of equity in the company's balance sheet. Even though leverage is one of the key indicators of a firm's financial health it is not a commonly used factor in order to test the relationship with the dividend payout ratio. A firm's leverage can be measured using a wide range of formulas, however, the most common ratios used for the measurement debt equity ratio and debt assets ratio. Debt equity ratio is expressed as total debts/total equity while the debt assets ratio is expressed by total debt/total assets. Werner & Jones (2003) states that debt to assets ratio reflects the broader picture of firm's liabilities, however, it is not straight forward about the proportion of debt to equity. In view of this, debt to equity ratio is more appropriate. Debt to equity ratio indicates in which proportions the firm is financed by creditors relative to shareholders.

Jabbouri (2016) states that level of indebtedness is one more variable that is related to dividend policy. Increased exposure of a firm to risks leads to higher levels of leverage. High indebtedness decreases the possibility of sending dividend signals to investors. Sourav, Abhijit & Kalpataru (2020) opine that leverage has a direct impact on the firm profitability and thus on dividend policy. A higher debt component implies that there is a commitment to meet a higher amount of debt obligations. The debt-equity ratio is a common ratio used as a proxy for financial leverage.

#### **Corporate Income Tax**

Kegan (2021) defines corporate income tax as a tax on the profits of a corporation. The taxes are paid on a firm's taxable income, which includes revenue minus cost of goods sold, general and administrative expenses, selling and marketing, research and development, depreciation, and other operating costs. Corporate income tax rates vary widely by country, with some countries considered to be tax havens due to their low rates. Corporate taxes can be lowered by various deductions, government subsidies, and tax loopholes, and so the effective corporate tax rate, the rate a corporation actually pays, is usually lower than the statutory rate; the stated rate before any deductions. The separate taxation of the incomes of corporations and their shareholders follows the legal principle that corporations and shareholders are distinct entities. Some scholars argue that it also accords with economic reality, particularly for large corporations with many shareholders who do not participate actively in controlling the enterprise.

#### **Theoretical Review**

This study is supported by the signaling Theory developed by John & Williams in 1985 and also The Bird in the Hand Theory propounded by Myron Gordon in 1956.

# **Signaling Theory**

This theory was developed by John & Williams in 1985 and with contribution from Bhattacharya in 1919. The research is based on the assumptions that outside investors have imperfect information regarding the firm's future cash flows and capital gains. A firm's sources of information such as accounting data and future prospect reports is not completely reliable. These kinds of information do not fully represent a firm's profitable business opportunities in the future. Given that outside investors have imperfect information regarding the firm's profit opportunities, the firm has to find other ways in order to convince outside investors about future cash flows and profits. Therefore, favorable signals such as increasing dividends provide a positive sign to outside investors. Another important assumption is that dividends are taxed at a higher rate compared to capital gains. Bhattacharya (1979) argues that under these circumstances even though there is a tax disadvantage for dividends, companies would choose to pay dividends in order to send positive signals to shareholders and outside investors. Thus, investors regard dividend changes as signals of management's earning forecast. Payment of dividends conveys information to the market with respect to the management expectations of future earnings. A change in dividend up or down is viewed as a signal that management expects future earnings to change in the same direction thus an increase in dividends is a positive signal that results in share prices increase and vice versa.

#### **Bird in the-Hand Theory**

The Bird in the Hand Theory was developed by Myron Gordon in 1956 and John Lintner in 1962. This theory suggests that investors are generally risk averse and attach less risk to current dividend payment than the promise for future capital gain. It is based on the logic that what is available at present is preferable to what may be available in the future. They argued that the future is uncertain and the more distance the future is, the more uncertain it is likely to be. They also argue that there is a relationship between the values of the firm with its dividend policy. The benefits of current high dividend to the firms is that it will lead to increase in the firm's share price which will also increase the firm value.

The Bird in the Hand Theory suggests that investors are generally risk averse and attach less risk to current dividend payment than the promise for future capital gain. Investors in the light of this believe that the dividend available at present is preferable to the capital gains that is uncertain in the future. On the other hand, the purpose of the study is to investigate the determinants of dividend policy in industrial goods manufacturing firms in Nigeria. Since the theory is well situated for the study, it is anchored on the Bird in the Hand Theory.

#### **Empirical Review**

Jovković, Vasić & Bogićevic (2021) evaluated the determinants of dividend policy in the banking sector of Serbia during the period of 2009 to 2018. Profitability, liquidity, leverage, growth, previous year dividend and size (Natural logTotal Assets) were used as the independent variables while dividend payout ratio was used as the dependent variable and proxy for dividend policy. A total of 27 banks operating Serbia during the period was targeted, out 10 were sampled for the study using total assets at the end of 2018 as criteria for the selection. Panel data regression and correlation analysis were used to analyze the data collected for the study. Results of analysis show the strongest, statistically significant relation is noticed between the growth of dividend payout ratio and previous year's dividends. Profitability, leverage, liquidity and bank size exhibited weak positive relationship with dividend payout ratio while negative relationship was observed between growth rate and dividend payout ratio.

Pinto & Rastogi (2019) examined the factors influencing dividend policy in emerging financial market in India. A total of 424 firms were sampled for the study. The study adopted a balanced panel data consisting of firms listed on the National Stock Exchange of India during the period from 2006 to 2017. Pooled ordinary least squares regression analysis was used to analyze the data collected for the study. Findings indicate that size, profitability and interest coverage ratios have a significant positive relation with dividend policy. Furthermore, business risk and debt reveal a significantly negative relation with dividends. There is also evidence that dividend policies vary significantly across industrial sectors in India.

Hafeez, Shahbaz, Iftikhar & Butt (2018), investigated the relationship between dividend policy and firm performance in Nigeria. A sample of 15 manufacturing firm listed on the Nigeria Stock Exchange during the period of 2014 to 2017 was selected for the study. Return on asset and return on equity were used as dependent variables and measures of firm performance while dividend payout ratio, earning per share, price earnings ratio are the independent variables and measures of dividend policy. Multiple regressions, correlation and descriptive statistics were used as data analysis techniques. Findings reveal that all the independent variable have a positive relationship with firm performance. Dividend pay-out ratio, earning per share, price earnings ratio positively influence return on equity.

Hasan, Ahmad, Rafiq & Rehman (2015) investigated the relationship between dividend pay-out ratio and profitability of a firm in Pakistan. Two main sectors of Pakistan were selected, energy and textile. The study covers a time span of 1996-2008. Firm performance is measured by earning per share and return on assets. Ordinary least square regression analysis was used to analyze the secondary data collected for the study. The regression results suggest that no matter what industry is, there is a negative impact of dividend pay-out ratio on earnings of firms.

Husain, Sunardi, Lisdawati (2020) conducted a study to ascertain the effect of dividend policy on firm value in Indonesia during the period from 2014 to 2018. Firm value is measured using Price-to-Book Value. A sample of 11 firms under the automotive and components sub-sector listed on the Indonesia Stock Exchange were selected for the study. Secondary data were obtained from the sampled firms covering the period of the study. Result from the analysis indicates that dividend Policy has no significant effect on firm's value.

Sondakh (2019) examined the effect of dividend policy, liquidity, profitability and firm size on firm value in Financial Service Sector industries listed on Indonesia Stock Exchange during the period of 2015-2018. This study attempts to analyze the dividend, liquidity, profitability and size of the firm policy on the value of the firm. A total of 99 Financial Service firms were listed on Indonesia during the period, out of which 12 of them were sampled for the study. Multiple linear regression analysis and t-test were used to analyze the data collect for the study. Findings suggest that dividend policy has a negative and significant effect on firm value, liquidity and firm size influence firm value positively and significantly while the influence of profitability on firm value is not statistically significant during the period.

Lumapow & Tumiwa (2017) investigated the determinants of dividend policy, firm size and productivity on firm value of firm listed in Indonesia. The dependent variable is firm value, surrogated with Tobin Q ratio while the independent variables are dividend payout ratio, firm size, total assets and firm age. A sample of 23 manufacturing firms listed on the Indonesia Stock Exchange during the period from 2008 to 2014 was selected using purposive sampling technique.

Secondary data were collected from the annual reports and financial statements of the selected firms and analyzed using panel data regression analysis. The test results show that dividend policy has a negative and significant effect on firm value; Furthermore, firm size has a positive and significant impact on firm value; and lastly, the productivity of the firms has a positive and significant impact on the firm value

Bogna (2015) conducted a study to ascertain the determinants of dividend policy firms listed on the Warsaw Stock Exchange in Poland. The data employed is derived from the Thompson Reuters database covered the period from 2000 to 2012. Panel data analysis was used to analyze the data collected for the study and thus, investigate the determinants of dividend policies of Polish firms. Findings from the study reveals that the factor influencing dividend policy in Poland include, profitability, liquidity, size and leverage of the firm.

Mubaraq, Rahayu, Saifi & Darmawan (2021) examined the moderating effect of corporate governance on the relationship between dividend policy, capital structure, and firm value. The population of the study is 141 manufacturing firms listed on the Indonesia Stock Exchange during the period of 2014 to 2018. This firms were divided into three sectors: the industrial and chemical base sector, various industrial sectors, the consumption industry sector, and in more detail into 19 subsectors. A sample of 64 firms was selected from the population and was used to study. Regression analysis was used to analyze the data collected from the sampled firms. Findings reveals a significant positive relationship between dividend policy and firm value. On the other hand, there is no significant positive relationship between capital structure and firm value and an insignificant moderation effect between dividend policy on firm value and an insignificant moderation effect between capital structure and firm value and an insignificant moderation effect between dividend policy on firm value and an insignificant moderation effect between dividend policy on firm value and an insignificant moderation effect between dividend policy on firm value and an insignificant moderation effect between capital structure and firm value.

Vidiyanna & Rachmawati (2018) explored the effect of profitability, dividend policy, debt policy, and firm age on firm value in the Non-Bank Financial Industry in Indonesia. Profitability (return on assets and return on equity), dividend policy (dividend payout ratio), debt policy (debt equity ratio), and firm age were used as the independent variable while Tobin Q is used as the dependent variable and proxy for firm value. Firm size (total assets) is the control variable of the study. A sampling of 38 non-financial firms listed on Indonesia Stock Exchange was selected using purposive sampling method. Secondary data covering the period of 2014 to 2016 were collected from the selected firms. The data was analyzed using panel data regression analysis. Findings shows that profitability (ROE), and debt policy (DER) have no significant effect of firm value, dividend policy have a positive significant effect on firm value while firm age has a negative significant effect on firm value. Meanwhile the control variable (firm size) has no significant effect on firm value.

Anike (2017) studied the effect of dividend policy and earnings on share prices of Nigerian banks during the period from 2006 to 2010. The study adopted ex-post-facto research design and panel data regression analysis. Secondary data were obtained from the annual reports and financial statements of the selected banks. Results show that dividend yield had negative significant effect on banks' share prices. In addition, earnings yield had negative significant effect on banks' share prices. The result of the ordinary least square regression also reveals that dividend yield, earnings yield and dividend pay-out ratio are not factors that influences share prices during the period under investigation.

Rehman (2016) investigated the impact of capital structure and dividend policy on firm value of non-financial firms in Pakistan. Three independent variables and proxies for capital structure and dividend policy are: fixed assets turnover, debt to assets ratio, sales growth, shareholders equity, earnings per share, dividend payout ratio while Tobin Q is the independent variable and proxy for firm value. At total of 496 non-financial firms listed on Karachi Stock Exchange during the period were targeted, out of which 111 met the selection criteria and where subsequently selected for the study. Panel data regression analysis and descriptive statistics were used to analyze the data collected for the study. Results indicates that: Debt equity ratio turnover positively and significant affect Tobin Q Ratio. Earnings per share has significant effect on Tobin Q Ratio. Fixed assets turnover and dividend payout ratio have positive significant effect on Tobin Q Ratio. Equity and sales growth were found to be good predictors of firm value. Earnings per share was found to be good predictor of firm value while dividend payout ratio was found to be statistically insignificant.

Odesa & Ekezie (2015) examined the factors that determine dividend policy of listed firms in Nigeria. The study used descriptive and ex-post facto research design together with regression analysis to test the relationship between the variables. The study revealed that investment opportunity has a negative relationship with dividend policy whereas debt, return on equity, structure of shareholder, and last paid dividend have a significant positive relationship with dividend policy. The study recommended among others that managers should pay more attention to profit, total debt, shareholder structure and last dividend paid in formulating dividend policy as this will help reduce principal-agent conflict and ultimately enhance the value of the firm.

Aroh, Egolum, Uchenna & Chukwuani (2021) examined dividend policy as determinants of firm value of firms listed in Nigeria from 2010 to 2019. Market to book ratio was used to proxy firm value while the selected proxies of dividend policy are, dividend yield, dividend per share and dividend pay-out ratio. A total of 106 non-financial firms were listed on the Nigerian Stock Exchange during the period. The non-financial firms are: Consumer Services Sector 15, Healthcare Sector 10, Basic Materials Sector 11, Consumer Goods Sector 26, Industrial Sector 24, Oil & Gas Sector 13, Technology Sector 7. A sample of 9 firms was selected for the study. Panel data regression and correlation analysis were used to examine the data collected. Results from the analysis indicate that dividend yield, dividend per share and dividend pay-out ratio are not significant determinants of firm value across the listed non-financial firms during the period. However, results from correlation analysis shows that dividend pay-out has weak relationship with firm value. Again, dividend per share has a strong positive relationship with firm value while dividend yield has a strong negative relationship with firm value.

Sourav, Abhijit & Kalpataru (2020) explored the relationship between dividend policy and firm value with respect to financial crisis. The investigation is based on data of 500 companies listed on the BSE for the period 2001 to 2017. The dynamic panel regression with two-step system Generalized Method of Moments was applied to the data. Results suggest that dividend policy does not affect firm value. However, the study observes that financial crisis impacted the relationship between dividend behavior and firm value. Furthermore, the higher dividend yield in post crisis period may indicate evidences of signaling hypothesis.

Sutomo & Budiharjo (2019) analyzed the effect of dividend policy on firm value and return equity on firm value in Indonesia during the period of 2014 to 2017. Dividend policy was surrogated with dividend payout ratio while profitability was proxied with return on equity. The population of this study is all manufacturing firms and chemical industrial sectors listed on Indonesia Stock Exchange during the period. Two firms that met the criteria for selection were sampled for the study. Descriptive statistics, t-statistical and multiple linear regression analysis were used to analyze the secondary data collected from the ample firms. Finding reveals that dividend payout ratio has a positive and insignificant effect on firm value proxied with Price Book Value. Finding further shows that return on equity has a positive and significant effect on firm value.

# Methodology

# **Research Design**

The study adopted *ex-post facto* research design. This is because secondary data is used for the study. The importance of *ex-post facto* research design is that it is a realistic approach in solving business and social science problems which involves gathering records of past event.

# Sources of Data

The data for this study were sourced from secondary data which were collected from published annual reports and financial statement of the selected foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period of 2011 to 2020.

# Area of the Study

The study was conducted in Nigeria and specifically on foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period of 2011 to 2020.

# Population

A total of 15 foods and beverage manufacturing firms were listed on Nigeria Stock Exchange during the period 2011 to 2020. These 15 firms constituted the population of the study.

# Sample Size Determination

A sample of 5 firms was assembled from the population of 15 foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period. Only the firms that declared dividends during the period of the study were considered in the sample. The five firms selected are: Guinness Nigeria Plc, Nigeria Breweries Plc, Nestle Nigeria Plc, Unilever Nigeria Plc and Dangote Sugar Nigeria Plc.

# **Model Specification**

The model specification for the study are shown below: DPS =  $\alpha + \beta_1 EPS + \beta_2 LQTY + \beta_3 LVAG + \beta_4 CITX + \epsilon$ 

Where:

DPR =	Divide	nd Per Share
EPS	=	Earnings

LQTY	=	Liquidity
LVAG	=	Leverage
CITX	=	Corporate Income Tax
β1 - β4	=	Coefficients of the Independent Variables
α	=	Constant term
3	=	Error margin

# **Method of Data Analysis**

Multiple regression analysis was to analyze the data collected for the study. Adjusted Coefficient of Determination (R-Square) was used to examine the extent to which the variations in the dependent variable is explained by the independent variable of the study. Earnings, liquidity, leverage and corporate income tax are the independent variables while dividend per share is the dependent variable and proxies for dividend policy.

# **Data Presentation and Analysis**

# **Data Presentation**

The main objective of the study is to examine the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria. The 15 foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period from 2011 to 2020 were targeted, out of which 5 were selected for the study. The data collected from the selected firms were computed and presented in table 1 while the raw data is attached as appendix one of the study.

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FIRM	YEAR	EARNINGS	CURRENT	DEBT EQUITY	LOG OF	DIVIDEND
		PER SHARE	RATIO	RATIO	TAX	PER SHARE
GUINNESS	2020	(53.74)	0.89	-	15.32	1.52
	2019	2.50	1.21	0.09	14.30	1.84
	2018	3.30	1.27	0.09	14.99	0.44
	2017	1.28	0.90	0.58	13.51	0.50
	2016	(1.34)	0.71	0.34	(12.71)	3.20
	2015	5.18	0.73	0.25	14.91	3.20
	2014	6.36	0.92	0.61	14.56	7.00
	2013	7.93	0.63	1.91	15.51	7.84
	2012	9.95	0.96	0.01	15.67	10.00
	2010	12.16	1.04	0.02	15.93	8.25
NBL	2020	0.92	0.44	9.42	15.25	1.76
	2019	2.01	0.57	7.02	15.80	2.33
	2018	2.43	0.62	4.12	16.12	3.73
	2017	4.14	0.56	0.80	16.11	3.57
	2016	3.58	0.52	1.51	16.24	4.60
	2015	4.82	0.41	-	16.62	4.70
	2014	5.62	0.50	1.30	16.76	5.75
	2013	5.70	0.45	0.47	16.77	3.00
	2012	5.03	0.65	2.56	16.68	3.00
	2010	5.03	0.63	2.07	16.72	1.25
NESTLE	2020	49.47	0.91	1.15	16.88	70.00
	2019	57.63	0.85	0.12	17.05	63.50
	2018	54.26	0.90	0.12	16.63	47.50
	2017	42.55	1.84	0.21	16.39	25.00
	2016	10.00	1.40	0.34	16.43	19.00
	2015	29.95	0.82	0.33	15.54	27.50
	2014	28.05	0.84	0.51	14.61	34.00
	2013	26.67	1.26	0.65	15.04	-
	2012	20.81	1.05	0.69	15.18	12.55
	2010	10.33	0.90	1.11	14.35	10.33
UNILEVER	2020	(0.69)	2.30	-	13.56	0.07
	2019	(1.29)	2.05	0.01	14.79	0.17
	2018	1.84	2.35	0.00	15.07	0.50
	2017	1.78	2.45	0.00	15.08	0.07
	2016	0.81	0.78	0.01	13.85	0.05
	2015	0.32	0.61	0.01	13.27	0.10
	2014	0.64	0.59	0.02	13.04	1.25
	2013	1.27	0.65	0.02	14.56	0.13
	2012	1.48	0.66	0.00	14.77	0.13
	2010	1.45	0.86	0.00	14.73	1.10
DANGOTE	2020	2.45	1.24	0.01	16.58	1.50
SUGAR	2019	1.87	1.29	0.01	15.82	1.09
	2018	1.85	1.49	0.01	16.35	1.09
	2017	3.31	1.34	0.02	16.44	1.09
	2016	1.20	1.14	0.02	15.47	0.59
	2015	0.96	1.08	0.09	15.43	0.40
	2014	0.97	1.02	0.09	15.11	0.59
	2013	0.90	1.34	0.01	15.51	0.49
	2012	0.90	2.08	-	15.53	0.30
	2010	0.62	1.86	-	15.07	0.59

#### **Table 1: Computed Data**

Source: Annual financial statement of the selected firms from 2010 to 2020

# **Data Analysis**

In order to test the four null hypothesis formulated for the study, the data extracted from the selected foods and beverage manufacturing firms listed on the Nigeria Stock Exchange during the period of the study were analyzed using multiple regression analysis and the results presented in the model summary in tables 2 and in the regression model in table 3.

# Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.6991(a)	.6753	.6094	106161.14645	

a Predictors: (Constant), EPS, LQTY, LVAG and CITX

# Source: SPSS Output

The model summary in Table 2 presents the predictive accuracy of the model. It could be observed from the table that the adjusted coefficient of determination (R-Square) is 0.6094. This result indicates that 61% of the variations in dividend per share of the selected foods and beverage manufacturing firms in Nigeria is explained by the independent variables comprising of earnings per share, liquidity, leverage and corporate tax while the remaining 31% is explained by other variable not included in the model of the study.

Table 3: Regression Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	707.3464	12019.2827		2.8718	.1328	
	EPS	.8181	105.2661	.5567	5.1634	.0000	
	LQTY	.5020	336.5672	.3922	2.5404	.0221	
	LVAG	.4994	966.1820	.1991	2.1212	.0474	
	CITX	7033	611.7563	4270	-4.3717	.0000	
a Dependent Variable, DDC							

a. Dependent Variable: DPS

# SOURCE: SPSS output

The multiple regression results of the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria are presented in Table 3. The possible determinants of dividend policy in this industrial sub-sector which were considered earnings per share, liquidity (surrogated with current ratio), leverage (surrogated with debt equity ratio) and corporate income tax. When these results are inserted in the multiple regression model, the resultant equation is as follows: DPS = 0.8181 + 0.5020 + 0.4994 - 0.7033

# **Test of Hypotheses**

# **Decision Rule:**

Level of significance ( $\alpha$ ) = 0.05. Reject the null hypothesis if the significant value in the regression coefficient is less than the level of significance (0.05), otherwise accept the null hypothesis. In line with this decision rule, the results of the test of hypotheses are hereby presented below:

# **Test of Hypothesis One**

H<sub>0</sub>: Earnings per share does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria

H<sub>1</sub>: Earnings per share significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

Results from the multiple regression analysis in table 3 indicate that earnings per share (EPS) significantly affect dividend per share (DPS) of the foods and beverage manufacturing firms in Nigeria. This was observed from the significant value of earnings per share in the regression table which stands at 0.0000, and which is significant at 0.05 level of significance (0.05 > 0.0000). In the light of this finding, we reject the null hypothesis and accept the alternative

that which states that earnings per share significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

# Test of Hypothesis Two

H<sub>0</sub>: Liquidity does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria H<sub>1</sub>: Liquidity significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

The multiple regression results in table 3 also shows that liquidity (LQTY) significantly affect dividend per share (DPS) of the foods and beverage manufacturing firms during the period. This was confirmed from the significant value of liquidity in the regression table which is 0.0221, and which is significant at 0.05 level of significance (0.05 >0.0221). In view of this finding, we reject the null hypothesis and accept the alternative that which states that liquidity significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

# **Test of Hypothesis Three**

H<sub>0</sub>: Financial leverage does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria

 $H_1$  Financial leverage significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria. Table 3 further disclosed that leverage (LVAG) significantly affect dividend per share (DPS) of the foods and beverage manufacturing firms during the period. This was observed from the significant value of the leverage in the regression model which is 0.0474, and which is significant at 0.05 level of significance (0.05 > 0.0474). Therefore, we reject the null hypothesis and accept the alternative that which states that leverage significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

# Test of Hypothesis Four

H<sub>0</sub>: Corporate income tax does not significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

H<sub>1</sub>: Corporate income tax significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

The model table also suggest that corporate tax (CITX) significantly affect dividend per share (DPS) of the foods and beverage manufacturing firms during the period. This was confirmed from the significant value of the corporate tax in the regression table which is 0.000, and which is significant at 0.05 level of significance (0.05 >0.0000). Thus, we reject the null hypothesis and accept the alternative that which states that corporate income tax significantly affect dividend per share of foods and beverage manufacturing firms in Nigeria.

# **Summary of the Findings**

Based on the regression analysis conducted to ascertain the determinants of dividend policy in foods and beverage manufacturing firms in Nigeria, the findings and the deduced discussions that ensued, we summarized the findings of the study as follows:

- i. Earnings per share positively and significantly affect the dividend policy of foods and beverage manufacturing firms in Nigeria.
- ii. Liquidity positively and significantly affect the dividend policy of foods and beverage manufacturing firms in Nigeria.
- iii. Leverage positively and significantly affect the dividend policy of foods and beverage manufacturing firms in Nigeria.
- iv. Corporate income tax negatively and significantly affects the dividend policy of foods and beverage manufacturing firms in Nigeria.

# Conclusion

The study investigated the determinants of dividend policy of foods and beverage manufacturing firms in Nigeria during the period from 2011 to 2020. In a view to conduct the study, a sample of 5 firms was selected from the population of 15 foods and beverage manufacturing firms listed on the Nigerian Stock Exchange during the period. The independent variables of the study are; earnings per share, liquidity, leverage and corporate income tax while the independent variable and measures of dividend policy is dividend per share. The data collected from the annual

reports and financial statements of the selected firms were analyzed using multiple regression analysis. In line with the results from the study, we conclude that the earnings per share, liquidity, and leverage positively and significantly determine the dividend policy of foods and beverage manufacturing firms in Nigeria during the period. This study equally conclude that corporate income tax negatively and significantly determines the dividend policy of the firms.

# Recommendation

In line with the findings and conclusions of the study, we suggest the following recommendations for the foods and beverage manufacturing firms in Nigeria:

- i. The foods and beverage manufacturing firms in Nigeria should improve their earnings per share to boast dividend payment to their shareholders. This can be achieved by increasing the firms' profitability and also by repurchasing the firms sharing floating around the stock exchange market. Repurchased shares increase firm value and also enable firm owner consolidate ownership of their firms.
- ii. The firms should also increase their liquidity by investing in short term assets and also by regularly monitoring their liquidity ratios. Some firms are illiquid simply because they fail to monitor their liquidity ratios on a regular basis.
- iii. The firms should in the light of this findings use more of debt financing to finance their investment. However, each of the firm in this sub-sector should locate its optimal capital structure and ensure that it does not use debts beyond the optimal point. This is to avoid the risk associated with bankruptcy.
- iv. Since corporate income tax negatively and significantly affect the divided policy of the firms, it is our recommendation that the firms should engage tax consultants that will advise them on tax matters from time to time, this will assist the firms reduce tax liability and boast their dividend policy.

# References

- AL-Kuwari D. (2009). Determinants of the dividend policy in emerging stock exchanges: The case of GCC countries. *Global Economy & Finance Journal*, 2 (2), 38-63.
- Amidu, M. & Abor, J. (2006). Determinants of the dividend payout ratio in Ghana. *The Journal of Risk Finance*, 7(2), 136 145.
- Amidu, M. (2007). How does dividend policy affect the performance of firms in Ghana Stock Exchange? Journal of Investment Management and Financial Innovations, 4(2), 6-8.
- Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance, 7 (2),* 136-145.
- Aroh, N. N, Egolum, Uchenna, P & Chukwuani, V. N (2021). Dividend policy determinants of firm value: Empirical evidence from listed non-financial companies in Nigeria. *International Journal of Research and Innovation in Social Science*, 5(7), 612-634.
- Azhagaiah, R., & Priya, N. S. (2008). Effect of dividend policy on shareholders' wealth. *International Research Journal* of Finance and Economics, 20, 189-187.
- Bogna, K. J (2015). Determinants of dividend policy: Evidence from Polish Listed Companies. *Procedia Economics and Finance*, 23 (1), 473-477.
- Brigham, E. F., & Houston, J. F. (2011). Fundamentals of Financial Management. 7 ed. Mason: South-Wester
- Dada, O. D. & Awoyemi, S. O. (2015). An appraisal of the influence of dividend policy on share price of quoted companies in Nigeria. Journal of Business and Management, 17(12), 08 -16.
- Dogan, M. & Topal, S. (2014). The influence of dividend payments on company performance: The case of Istanbul Stock Management ,6(3). Retrieved from <a href="http://www.google.com">http://www.google.com</a> on February 4, 2016.
- Emeni, F. K. & Ogbulu, O. M. (2015). The effect of dividend policy on the market value of firms in the financial services sector in Nigeria. *Archives of Business Research*, 3(4), 102-111.
- Enekekwue, P. (2005). Corporate financial management. Congo: Africa Bureau of Educational Science.
- Enekwe, C. I.; Nweze. JA. U. and Agu. C. I. (2015). *The effect of dividend payout on 'performance evaluation*: Evidence of quoted cement companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 3(11), 40 59.
- Gill, A, Biger, N & Tibrewala, R (2010). Determinants of dividend payout ratios: Evidence from United States. *The Open Business Journal, 3, 8-14*
- Hafeez, A. & Attiya, Y. J. (2009). The determinants of dividend policy in Pakistan. International Research Journal of *Finance Economics*, 25(1), 148-171.

- Hafeez, M. M., Shahbaz, S., Iftikhar, I. & Butt, H. A. (2018). Impact of dividend policy on firm performance. International Journal of Advanced Study and Research Work, 1(4), 1-5.
- Harmono (2014). Balanced Scorecard Based Financial Management Approach Theory, Case, and Business Research, Publisher Bumi Aksara. Jakarta.
- Hellström, G & Inagambae, G (2012). Determinants of Dividend Payout Ratios A Study of Swedish Large and Medium Caps. M.Sc Degree project presented to Umeå School of Business and Economics.
- Hayes, A (2021). What Is Leverage? https://www.investopedia.com/terms/l/leverage.asp
- Jabbouri, I. (2016). Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets. *Research in International Business and Finance*, 37(1), 283-298.
- Jovković, B, Vasić, A.S & Bogićevic, J (2021). Determinants of dividend policy: A case of Serbia's Banking Sector. *Naše Gospodarstvo / Our Economy*, 6(1), 13-22.
- Juma'h, A. H. & Pacheco; C. J. (2008). The financial factors influencing cash dividend policy: a sample of us manufacturing companies. *International Empresaria Inter-Metro Business Journal*, 4(2), 23-43.
- Kegan, J (2021). What is corporate tax? https://www.investopedia.com/terms/c/corporatetax.asp
- Lumapow, L.S & Tumiwa, R.A.F (2017). The Effect of dividend policy, firm size, and productivity to the firm value. *Research Journal of Finance and Accounting*, 8(22), 20-24.
- Malik, J. (2011). Determinants of insurance company's profitability: An analysis of insurance sector of Pakistan. Journal of Monetary Economics, 99(1), 246-261.
- Mubaraq, M, Rahayu, S. M, Saifi, M. & Darmawan, A. (2021). The moderating effect of corporate governance on the relationship between dividend policy, capital structure, and firm value: Evidence from Indonesian manufacturer companies. *European Journal of Molecular & Clinical Medicine*, 8(1), 880-889.
- Pinto, G & Rastogi, S (2019). Sectoral analysis of factors influencing dividend policy: Case of an emerging financial market. *Journal of Risk and Financial Management, 12(1), 2-18.*
- Rehman, O.U (2016). Impact of capital structure and dividend policy on firm value. *Journal of Poverty, Investment and Development, 21(1), 40-57.*
- Sartono, A. (2010). Manajemen Keuangan Teori Dan Aplikasi. Edisi Keempat, Yogyakarta: Bpf
- Sondakh, R (2019). The effect of dividend policy, liquidity, profitability and firm size on firm value in Financial Service Sector industries listed on Indonesia Stock Exchange.
- Sourav, H. Abhijit, S. & Kalpataru, B. (2020). Impact of dividend policy on firm value with special reference to financial crisis. *SIT Journal of Management*, 10(2), 2020
- Sutomo, H & Budiharjo, R (2019). The effect of dividend policy and return on equity on firm value. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(3), 211-220.*
- Tahu, G. P & Susilo, D.D.B (2017). Effect of liquidity, leverage and profitability to the firm value (Dividend Policy as Moderating Variable) in manufacturing company of Indonesia Stock Exchange. *Research Journal of Finance and Accounting*, 8(18), 89-98.
- Tuovila, A. (2021). What Are Earnings? https://www.investopedia.com/terms/e/earnings.asp
- Vidiyanna, R. P. & Rachmawati, A. (2018). The effect of profitability, dividend policy, debt policy, and firm age on firm value in the Non-Bank Financial Industry. *Journal Ilmu Management & Ekonomika*, 10(1),14-21.