

# Testing Dividend Irrelevance Theory: Evidence from Nigeria Non-Finance Listed Firms

Usman Olanrewaju Lawal, Dr Jimba Isiaka Kareem

Afe Babalola University, Ado-Ekiti, Nigeria

DOI: https://dx.doi.org/10.47772/IJRISS.2024.8080357

#### Received: 13 August 2024; Accepted: 20 August 2024; Published: 25 September 2024

# ABSTRACT

The study aims to test dividend irrelevance theory: evidence from Nigeria's non-finance listed firms. The paper reviews related concepts, a few theories, and empirical to explore dividend mechanisms, analysis, and impact on a firm's growth. Secondary data was retrieved from annual reports of fifteen (15) non-finance listed firms in the Nigeria Stock Exchange (officially Nigeria Exchange Group; during the fiscal periods of 2010 to 2022). A judgmental research sampling design was adopted to assess the variables using a panel data regression technique via Ordinary Least Square model, to estimate the specified equation. To observe the relationship between the dependent (explained); Dividend Payout (DIP) and selected independent (explanatory) variables; Earnings Yield of Firms Value (EYV) Data, Aggregate Asset Share prices (ASP) of firms, Market Value Added Firm Value (MVAA), Tobin Performance Data (TOBQ) and Price to Revenue Firm Valuation (PRV). Prob (Fstat.) at 0.000 proves that the logged exogenous variables are significant. T-statistic values show that logmarket value (0.000000) logearnings yield (eyv; -5.45), logprv (-0.504126), and logtobq (0.000000) are insignificant (at 5%). Interestingly, the R-squared and the Adjusted R-squared result of the logged independent variables both present a 100% estimate, depicting significance in the regressed model. However, policy implications and recommendations are anchored on the need to practically improve non-finance listed firms in the NSE by addressing the problems of agency cost, high tax rates on dividends, insider- information factors, unaccountable dividend payouts, balance sheet discrepancies amongst other macro-economic indicators that can threaten the development of non-finance quoted firms. All hands (researchers, analysts, policymakers) must be on deck in the areas of share price reactions, market base and performance as well as the under-development of the stock market as arguments of dividend irrelevance will remain a puzzle in the long run be it accepted or rejected.

Keywords: Dividend Policy, Dividend Irrelevance Theory, Firm Value,

# BACKGROUND

#### **History of Dividend Policy**

The phenomenon of dividends sprang during the close of the 15th century when ships of marine commanders in Great Britain and Holland took it upon themselves to sell the economic rights of gaining a share in the earnings of each journey. These earnings were later distributed among the right holders at the end of the journey thereafter, contracts were terminated (Al-Malkawi et al., 2010). The cancellation of the agreement after each journey not only protected right-holders earnings per share but also contributed to the reduction of fraudulent related activities and deception by the management board (Baskin, 1988). However, in the late sixteenth century these rights were made public (open markets) in Amsterdam and slowly repealed by proprietorship stakes (Al-Malkawi et al., 2010), making the popularity of the contracts evident and stable even as the end of every journey seemed more difficult (Baker, 2009). The outcome was that the formation of businesses as "going concern" units only distributed the earnings of the venture. The units determined what part of the business earnings would be remitted to the stakeholders, thus introducing the first dividend payment rules (Frankfurter et al., 2003) in turn, the capital requirements of these units for trading with nations overseas grew immensely and evolved into joint-stock companies (Kindleberger, 2015). As a result of these, the companies that inclined towards joint stock companies were mostly chartered trading firms (Al-Malkawi et al., 2010).

A series of events began to occur as subsequent companies were chartered and given licenses to operate and



practice trading activities in Europe. For instance, Eastland Trading Company was the first in Britain and was chartered in the late 15th century with the license to practice monopoly rights to trading with the northern region of the European continent. Following this, in 1553 the Muscovy firm was chartered to trade with Russia, and in 1581, the Levant Company to trade with Turkey (Scott, 1912), Dutch East India Company (1602) in Holland and was issued a license to dominate Indo-Pak subcontinent (Loon, 1913) which was the company to issue the first joint-stock shares in history and the first permanently structured company (Kindleberger, 2015).

# Introduction

It cannot be over-emphasized that 'Dividend policy' remains one of the most pertinent policies) in financial matters from the viewpoint of the company, the shareholders, the consumers, employees, regulatory bodies, and the Government of a nation (Monogbe and Ayankunle, 2015). Here, the capital goal of financial managers is to maximize the shareholder's wealth (maximized share prices). To achieve this, management (the gatekeepers of shareholder's interests) have to make three (3) key decisions which are serially known as; 1. *Investment Decision* (Investment decisions ascertain the total value and classes of assets employed by the firm) 2. *Financing Decision* (it determines the capital structure of the firm and forms the sources on which investment decisions are made) and 3. *Dividend decisions* (the management has to decide whether to distribute the profit partly or wholly among the shareholders or to retain it for reinvestment and development of the firm).

Dividends are commonly defined as the distribution of earnings (past or present) in real assets among the stockholders of the firm in ratio to their ownership. A dividend policy is a policy that the organization uses to decide how much it will pay out from the profit to shareholders in dividends. Dividend policy has two kinds: managed and residual dividend policy. A managed dividend policy is one in which management attempts to achieve a specific pattern of dividend payments i.e. it pays the same dividend until the management feels that it can maintain a different (increased) level of dividend.

Residual dividend policy is a means of calculating dividends that are based on the amount of equity that remains after capital expenditures associated with the investment have been met. This approach uses the company's cash flow to meet its current financial obligations, then issuing dividends to investors based on the residual, or what is left after those obligations are fulfilled. The ideal dividend policy is the one that results in maximum stock price, which leads to the growth of stockholders' wealth and increased economic growth. Managers follow dividend policy in determining the shape and magnitude of cash delivery to shareholders over time. Dividends are usually paid out of the current year's profit and sometimes from reserves and are normally paid in cash known as cash dividends. Other options available to the company for distributing the profits are stock dividend, stock splits and share repurchases. When dividends are paid in cash, it reflects negatively on the liquidity and reserves of the firm as it reduces both (Muhammed et al. 2018).

# **RESEARCH PROBLEM**

Since the establishment and operation of the Nigeria Stock Exchange (NSE officially Nigeria Exchange Group) on August 25<sup>th</sup>, 1961, the array of listed and non-listed firms ranging from financial or non-financial (consumer goods, oil and gas, conglomerates and industries etc). have emphasized exponentially on the discrepancies bordering dividends of (major or minor) shareholders. Literature has recognized a series of challenges that can be traced to agency costs or information asymmetry on the part of managers of these firms.

In addition, the concept of dividend irrelevance holds that dividends are of little or no benefit to a firm's share price as debates from relevant scholars conclude that the theory adds no form of value to investors as its payment may damage the financial image of the company in the market. This paper seeks to buttress on key theories of agency costs, pecking order, dividend policy as well as the classes of dividend irrelevance that could fill in the gap of knowledge of dividend irrelevance theory.

# **Objectives of the study**

The aim of the research is simply to review the existing theoretical and empirical literature on dividend policy, and dividend irrelevance theory and to discover any pertinent knowledge gaps for further research. Primarily,



#### the direction of the objective is categorized by;

- i. To examine the nexus between Aggregate Asset Share prices (ASP) of firms and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- ii. To evaluate the relationship between Earnings Yield of Firms Value (EYV) Data and dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- iii. To ascertain Market Value Added Firm Value (MVAA) contribution to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- iv. To analyze the link between Price to Revenue Firm Valuation (PRV) and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange.
- v. To assess the contribution of Tobin Q Performance Data (TOBQ) to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange.

#### **Research Question**

- i. Is there any valid link between the Aggregate Asset Share prices (ASP) of firms and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange?
- ii. Is Earnings Yield of Firm Value (EYV) impacting significantly on the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange?
- iii. How has Market Value Added Firm Value (MVAA) contributed to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange?
- iv. What is the relationship between Price-to-price-to-revenue firm Valuation (PRV) and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange?
- v. Can Tobin Q Performance Data (TOBQ) contribute significantly to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange?

#### Hypotheses

The hypotheses indicated the selected 15 non-finance listed firms to be tested in this study are stated below in their null form:

*H*<sub>1</sub>: There is no significant association between the Aggregate Asset Share prices and dividend payout

*H*<sub>2</sub>: There is no significant impact between the Earnings Yield of Firms Value and the dividend payout ratio.

*H*<sub>3</sub>: There is no significant link between Market Value Added Firm Value and the dividend payout ratio.

*H*<sub>4</sub>: There is no significant relationship between Price Revenue Firm Valuation and the dividend payout ratio.

*H*<sub>4</sub>: There is no significant relationship between Tobin Q\_Performance Data and the dividend payout ratio.

# **CONCEPTUAL FRAMEWORK**

# The Dividend Irrelevance of Miller and Modigliani (1961): The Federal Rules of Evidence Rule 702 (2000) and The Sarbanes-Oxley Act (2002)

Deduced from the theory of basic financial management, three (3) key decisions are drawn to maximize shareholder's wealth, namely; the investment decision, the financing decision, and the dividend (distribution) decision. Miller and Modigliani (1961) posited that dividend policy was irrelevant. The article (page 294) of De



Angelo and De Angelo (2006) asserts that Miller and Modigliani's 1961 dividend irrelevance theorem adds to the bedrock of modern corporate finance theory(s). Upon publication of M&M's article (1961), dividend irrelevance has since dominated the literature of corporate financial management with findings validation and interpretations.

Section 807 of the Sarbanes-Oxley Act of 2002 (SOX), which concerns penalties for crimes of defrauding shareholders of publicly quoted firms, in line with Rule 702 of the Federal Rules of Evidence of 2000, emphasizes the relevance of accurate research methodology and epistemology. The issues of compliance with the financial management of quoted industries have provisionally expanded when compared with early legislation in the 1930's, which includes; the Securities Act (1933) and the Securities and Exchange Act (1934). Notably, for over five (5) decades, the M &M (1961) theory on dividends still comprises an integral part of corporate financial management, thus it needs further assessment on their dividend irrelevance analysis from the perspective of accurate research methodology and epistemology for the establishment of contents, to satisfy the processes of Sarbanes-Oxley Act of 2002 and Federal Rules of Evidence Rule 702 of 2000.

# **Concept of Dividend Policy**

Rustagi, (2001) conceptualizes the term dividend as it refers to that portion of profit (after tax) that is distributed among the owners/shareholders of the firm. Dividends interact with size which is similar to the profitability factor, since large firms can obtain financial resources more easily (Padron et al. 2005), it is reasonable to assume that large firms, when issuing more dividends to their stockholders, will tend to borrow less money from banks compared to small firms will do.

Maheshwari, (1999) defined dividend as the return that a shareholder gets from the company, out of its profits, on his shareholdings. In other words, the dividend is that part of the net earnings of a corporation that is distributed to its stockholders. It is a payment made to the equity shareholders for their investment in the company.

Dividend policy therefore means the practice that management follows in making dividend pay-out decisions, or in other words, the size and pattern of cash distributions over time to shareholders (Ronald et al 2000). In other words, dividend policy is the firm's plan of action to be followed when dividend decisions are made. It is the decision about how much of earnings to pay out as dividends versus retaining and reinvesting earnings in the firm.

Dividend policy also means policy or guideline followed by the management in declaring of dividend. A dividend policy decides the proportion of dividends and retains earnings. Retained earnings are an important source of internal finance for the long-term growth of the company while dividend reduces the available cash funds of the company. There is a reciprocal relationship between retained earnings and dividend i.e. larger the retained earnings, lesser the dividend and smaller the retained earnings, larger the dividend.

James (1963) says the choice of dividend policy have effects on the value of the enterprise therefore dividend policy must be evaluated in light of the objective of the firm namely, to choose a policy that will maximize the value of the firm to its shareholders

Dividend policy determines the ultimate distribution of the firm's earnings between retention (that is reinvestment) and cash dividend payments of shareholders (Moyer & Guigan 2001)

# **Types of Dividend**

1. **Cash dividend:** Companies mostly pay dividends in cash. A Company should have enough cash in its bank account when cash dividends are declared. If it does not have enough bank balance, arrangements should be made to borrow funds. When the Company follows a stable dividend policy, it should prepare a cash budget for the coming period to indicate the necessary funds, would be needed to meet the regular dividend payments of the company. It is relatively difficult to make cash planning in anticipation of dividend needs when an unstable policy is followed. The cash account and the reserve account of a company will be reduced when the cash



dividend is paid. Thus, both the total assets and net worth of the company are reduced when the cash dividend is distributed. The market price of the share drops in most cases by the amount of the cash dividend distributed.

2. Bonus Shares or Stock Dividends: This involves the distribution of shares free of cost to the existing shareholders. Most times bonus shares are issued instead of cash dividends. Issuing bonus shares increases the number of outstanding shares of the company. The bonus shares are distributed proportionately to the existing shareholders. Hence there is no dilution of ownership. The declaration of the bonus shares will increase the paid-up Share Capital and reduce the reserves and surplus retained earnings of the company. The total net-worth (paid up capital plus reserves and surplus) is not affected by the bonus issue. Infect, a bonus issue represents a recapitalization of reserves and surplus. It is merely an accounting transfer from reserves and surplus to paid up capital. The following are advantages of the bonus shares to shareholders:

i) Tax benefit: One of the advantages to shareholders in the receipt of bonus shares is the beneficial treatment of such dividends concerning income taxes.

**ii**) Indication of higher future profits: The issue of bonus shares is normally interpreted by shareholders as an indication of higher profitability.

**iii**) Future dividends may increase: if a Company has been following a policy of paying a fixed amount of dividend per share and continues it after the declaration of the bonus issue, the total cash dividend of the shareholders will increase in the future.

**iv**) Psychological Value: The declaration of the bonus issue may have a favourable psychological effect on shareholders. The receipt of bonus shares gives them a chance to sell the shares to make capital gains without impairing their principal investment. They also associate it with the prosperity of the company.

**3. Special dividend:** In special circumstances, the Company declares Special dividends. Generally, the company declares a special dividend in case of abnormal profits.

**4. Extra-dividend:** An extra dividend is an additional non-recurring dividend paid over and above the regular dividends by the company. Companies with fluctuating earnings pay out additional dividends when their earnings warrant it, rather than fighting to keep a higher quantity of regular dividends.

**5. Annual dividend:** When annually company declares and pays a dividend is defined as an annual dividend.

**6. Interim dividend:** During the year any time a company declares a dividend, it is defined as an Interim dividend.

**7. Regular cash dividends:** Regular cash dividends are those the company exacts to maintain every year. They may be paid quarterly, monthly, semi-annually or annually.

8 **Scrip dividends:** These are promises to make the payment of dividends at a future date: Instead of paying the dividend now, the firm elects to pay it at some later date. The 'scrip' issued to stockholders is merely a special form of promissory note or notes payable

**9** Liquidating dividends: These dividends are those that reduce paid-in capital: It is a pro-rata distribution of cash or property to stockholders as part of the dissolution of a business

**10. Property dividends:** These dividends are payable in assets of the corporation other than cash. For example, a firm may distribute samples of its product or shares in another company it owns to its stockholders.

# **Dividend Decision**

The company's Board of Directors are responsible for making dividend decisions. They are faced with the decision of whether to pay out dividends or to reinvest the cash into new projects. The dividend policy decision



is a trade-off between retaining earnings versus paying out cash dividends. Dividend policies must always consider two basic objectives:

- 1. Maximizing owners' wealth
- 2. Providing sufficient financing

While determining a firm's dividend policy, management must find a balance between current income for stockholders (dividends) and future growth of the company (retained earnings). In applying a rational framework for dividend policy, a firm must consider the following two issues:

- i. How much cash is available for paying dividends to equity investors, after meeting all needs-debt payments, capital expenditures, and working capital (i.e. Free Cash Flow to Equity FCFE)
- ii. To what extent are good projects available to the firm (i.e. Return on equity ROE > Required Return)

The potential combinations of FCFE and Project Quality and the generalizations of the dividend policy to be adapted in each situation are presented below;

Factors	FCFE> Dividends	FCFE <dividends< th=""></dividends<>
ROE< Cost of Equity	Poor Projects Cash flow surplus Increase Dividends Reduce Investment	Poor Projects Cash flow Deficit Decrease Dividends Reduce Investment
ROE> Cost of Equity	Good Projects Cash flow surplus No Change	Good Projects Decrease Dividends Invest in Projects

#### **Dividend Decision Matrix (Authors format)**

#### **Dividend Payment Procedures**

The firm's board of directors normally meets quarterly to evaluate financial performance and decide whether, and in what amount, dividends should be paid. The following have to be reached if the dividend is to be paid;

The declaration date is the day on which the BOD (board of directors) declares a payment of dividend.

**Record Date:** Here, all persons whose names are recorded as stockholders will receive the dividend.

Payment date: The dividend checks are mailed to shareholders of record.

**Cum Dividend and Ex-Dividend date:** This is the last say on which the buyer who buys the stock is entitled to get the dividend. Soon after, shares become ex-dividend on the date the seller is entitled to keep the dividend. This is the first date on which the buyer who buys the stock is not entitled to dividends.

#### **Theoretical Framework and Literature Review**

#### **Theories of Dividend Policy**

The theories of dividend policy will be discussed under two heading; dividend irrelevant theories and dividend relevant theories.

#### **Dividend Irrelevance Theories**

# I. The Residual Theory of Dividend Policy

The residual theory of dividend policy holds that the firm will only pay dividends from residual earnings, that is



dividends should be paid only if funds remain after the optimum level of capital expenditures is incurred i.e. all suitable investment opportunities have been financed. With a residual dividend policy, the primary focus of the firm is on investments and hence dividend policy is a passive decision variable. The value of a firm is a direct function of its investment decisions thus making dividend policy irrelevant.

### II. Dividend Irrelevance Theory

The inspiring effort of Miller and Modigliani (also known as MM) placed a new chapter in the history of dividends by putting forward the proposition that dividends are irrelevant to the firm value keeping in view certain assumptions. According to MM, given in a world where the behaviour of investors is not irrational i.e. the investors constantly desire to have extra wealth instead of less and don't care whether it is in the shape of cash or capital gain and there exists "perfect certainty" on behalf of investor's that they will invest and their returns are also certain and that the market is perfect i.e. no single entity can influence the market, the firm value does not depend upon the dividend policy, hence it is irrelevant of the firm value.

The dividend irrelevancy theory asserts that dividend policy does not affect either the price of the firm or its cost of capital.

#### **Dividend Irrelevance Arguments**

Dividend policy does not affect share price because the value of the firm is a function of its earning power and the risk of its assets. If dividends do affect value, it is only due to:

a) Information effect: The informational content of dividends relative to management's earnings expectations

b) *Clientele effect:* A clientele effect exists which allows firms to attract shareholders whose dividend preferences match the firm's historical dividend payout patterns

(c) *Signalling effect:* A rise in dividend payment is viewed as a positive signal whereas a reduction in dividend payment is viewed as a negative signal about the future earnings prospects of the company, thus leading to an increase or decrease in share prices of the firm. Managers use dividends as signals to transmit information to the capital market. Theoretical models by Bhattacharya (1979), Miller and Rock (1985) John and Williams (1985), and Williams (1988) tell us that dividend increases convey good news and dividend decreases convey bad news. However, this theory is based on the following assumptions:

- 1. There is an existence of perfect capital markets i.e. No personal or corporate taxes and no transaction costs.
- 2. The firm's investment policy is independent of its dividend policy.
- 3. Investors behave rationally and information is freely available to them
- 4. Risk or uncertainty does not exist.

**III. The Bird in the Hand Theory:** By Lintner (1962) and Gordon (1963). The essence of this theory is not stockholders are risk averse and prefer current dividends due to their lower level of risk as compared to future dividends. Dividend payments reduce investor uncertainty and thereby increase stock value. This theory is based on the logic that ' what is available at present is preferable to what may be available in the future'. Investors would prefer to have a sure dividend now rather than a promised dividend in the future (even if the promised dividend is larger). Hence dividend policy is relevant and does affect the share price of a firm.

# IV. The Tax Differential Theory (Graham and Dodd)

Propounders are Graham and Dodd in the early 1960's. This theory simply assumes that since dividends are taxed at higher rates than capital gains, investors require higher rates of return as dividend yields increase. This theory suggests that a low dividend payout ratio will maximize firm value.

# V. Percent Payout Theory

Rubner (1966) argued that shareholders prefer dividends while directors and managers requiring additional



finance would have to convince the investors that proposed new investments would increase their wealth. However, to increase their job security and status in the eyes of the shareholders, companies can adopt 100 per cent payout. However, this policy is not followed in practice.

# VI. Percent Retention Theory

According to Clarkson and Eliot (1969) a given taxation and transaction costs dividends are a luxury that is not afforded by shareholders as well as by companies and hence a firm can follow a policy of 100 per cent retention. Firms can thus avail of new investment opportunities that would be beneficial to shareholders too.

# VII. Agency Cost Theory

Dating from Jenson and Meckling's (1976) research, many studies have instigated debates that tie the financial activities of a firm with agency costs. It has been argued that firms pay dividends to reduce agency costs. Dividend payout keeps firms in the capital market, where monitoring of managers is available at lower cost. If a firm has free cash flows (Jensen (1986), it is better off sharing them with stockholders as dividend payout to reduce the possibility of these funds being wasted on unprofitable (negative net present value) projects.

# **DIVIDEND MODELS**

The various models that support the above-mentioned theories of dividend relevance and irrelevance are as follows:

#### Modigliani Miller approach

According to them the price of a share of a firm is determined by its earning potentiality and investment policy and not by the pattern of income distribution. The model given by them is as follows:

Po = D1 + P1/(1/Ke)

Where, Po = Prevailing market price of a share; Ke = Cost of equity capital; D1 = Dividend to be received at the end of period one; P1 = Market price of a share at the end of period one

According to the MM hypothesis, market value of a share before dividend is declared is equal to the present value of dividends paid plus the market value of the share after dividend is declared.

#### Walter's approach

According to Walter (1963), in the long run, share prices reflect the present value of future dividends. According to him investment policy and dividend policy are interrelated and the choice of appropriate dividend policy affects the value of an enterprise. His formula for determining the expected market price of a share is as follows:

 $P = \underline{D + r/k(E-D)}$ 

Κ

Where, P = Market price of equity share; D = Dividend per share; E = Earnings per share

(E-D) = Retained earnings per share; r = Internal rate of return on investment; k = cost of capital

# Gordon's approach (Dividend Yield Basis)

The value of a share, like any other financial asset, is the present value of the future cash flows associated with ownership. On this view, the value of the share is calculated as the present value of an infinite stream of dividends. Myron Gordon's Dividend Growth Model explains how dividend policy of a firm is a basis of establishing share value. Gordon's model uses the dividend capitalization approach for stock valuation. The



formula used is as follows:

#### Po = E1 (1-b)

K-br

Where; Po = price per share at the end of year 0; E1 = earnings per share at the end of year 1; (1-b) = fraction of earnings the firm distributes by way of dividends

b = fraction of earnings the firm ploughs back; k = rate of return required by shareholders

r = rate of return earned on investments made by the firm; br = growth rate of dividend and earnings.

#### **Pecking Order Theory**

The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers and Majluf, 1984). Owing to the *information asymmetries* between the firm and potential investors, the firm will prefer retained earnings to debt, short-term debt over long-term debt and debt over equity. Myers and Majluf (1984) argued that if firms issue no new security but only use its retained earnings to support the investment opportunities, then asymmetric information can be addressed. That implies that issuing equity becomes more expensive as asymmetric information between insiders and outsiders increases. Firms whose information asymmetry is large should issue debt to avoid selling underpriced securities. The capital structure decreasing events such as new stock offering leads to a firm's stock price decline.

In the presentation, the increasing capital structure events is received by the market as a welcome development as a result of financial intermediaries such as investment banks that could serve as insiders to monitor the industry's performance. Most Managers can conceal sensitive information that the market is unaware of. Insider investors have more information about the true distribution of firm returns than outsiders. Insider investors tend to limit the use of equity to sustain the dominance of the firm (Hutchinson, 1995).

# **EMPIRICAL REVIEW**

# **Objectives of the study**

The aim of the research is simply to review the existing theoretical and empirical literature on dividend policy, and dividend irrelevance theory and to discover any pertinent knowledge gaps for further research. Primarily, the direction of the objective is categorized by;

- i. To examine the nexus between Aggregate Asset Share prices (ASP) of firms and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- ii. To evaluate the relationship between Earnings Yield of Firms Value (EYV) Data and dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- iii. To ascertain Market Value Added Firm Value (MVAA) contribution to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange;
- iv. To analyze the link between Price to Revenue Firm Valuation (PRV) and the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange.
- v. To assess the contribution of Tobin Q Performance Data (TOBQ) to the dividend payout ratio of 15 selected non-finance listed firms in the Nigeria Stock Exchange.

A considerable number of debates have been said as to the importance of dividend policy to the value of firms "shares. The arguments centers on whether firms do have an optimum dividend payout ratio to maximise shareholders" wealth. There is one school of thought that argues that dividend Policy has a strong effect on stock



prices associated with (Lintner, 1956), (Walter, 1963), and (Gordon, 1959) vis-a-vis others who hold the view that investors tend to prefer high dividend payout ratio all else equals - firms with relatively high payout ratio will have relatively high stock prices while on the other hand, firms with relatively low payout ratio will have relatively low stock prices (Fischer, 1976).

The other school associated with (Millers and Modigliani, 1961) popularly known as the M-M hypothesis holds that investors are indifferent as to whether the firm has a high or low payout ratio (i.e dividend irrelevance as to the share prices). Their hypothesis is based on the Irrelevance argument. The two schools are often referred to as The Dividend Preference Theory and the Dividend Irrelevance Theory respectively. It is clear from the divergent views of these theorists that there is a controversy over dividends because there are alternatives that may or may not be better.

In the work of (Griffen, 2006) "Dividend Relevance is a theory relating to the impact of dividends on organisations and individual investors. The theory propounded by (Lintner, 1956) and (Gordon,1959), established that there is a direct relationship between dividend policy of firms and its market value. Investors respond quickly to receiving actual cash returns referring to this as the "Bird in hand theory" another name for dividend Relevance (de Boyrie, 2001). According to (Griffen, 2006), (Lintner, 1956) and (Gordon, 1959), as found in the work of (Hewitt Investment Group, 2002), which assert that dividends received today are preferable to future dividends, which are subject to uncertainty. According to (Hewitt, 2002), higher certainty will cause investors to ascribe a higher risk premium to those payments, thereby increasing a firms cost of capital by decreasing the value of stock" (Gordon and Lintner, 1956) strongly believed that stockholders prefer current dividends and that this causes a positive relationship between dividends and market value.

Other related literature and analysis conducted by scholars are concisely presented in tabular form in the appendix with their methodologies, variables and findings specifically stated.

# **RESEARCH METHODOLOGY**

To achieve the objectives of this study, secondary data collection prevailed for the analysis of variables. A judgmental sampling or non-probability or purposive sampling design is introduced to the study for the aim of targeting relevant samples from the population of interest (non-financial quoted companies). A total of 15 listed non-financial driven firms were retrieved from the Nigerian stock exchange (officially, Nigeria Exchange Group) annual reports and publications (2021).

Sectors	No. of firms	Companies
Oil and Gas	2	11plc and Conoil Nigeria Plc
Services	2	Ci Leasing, National Aviation Holding Nigeria
Industrial Goods	3	Berger Paints, Chemical and Allied Product and Lafarge Cement Wapco Nigeria
Consumer Goods	4	Cadbury Nig. Plc, Nestle Nig. Plc, Flour Mills of Nigeria, and Guinness Nigeria
Natural resources	2	Aluminum Extrusion Industry and B.O.C Gases Nigeria
Construction and Real Estate	1	Julius Berger Nigeria
Agriculture	1	Okomu Oil Palm
Total number of industry=15		

Table 1.



Source: Nigeria Stock Exchange Publications and Annual Report (2021), (Authors computation).

This is consistent with the propositions of Salawudeen, Muhammad and Moshoud (2020) whom adopted the OLS regression technique and panel data for a population of 14 listed industrial goods companies as at 31st December 2018 and also Adnan, Farzand, Meryam (2015) used a descriptive statistic, an OLS technique and a panel data for 122 non-financial companies in the Karachi Stock Exchange (2006-2011) which all proved to be an appropriate sample size in generalizing. The choice of the sampled firms was based on the size, market capitalization, and the availability of the annual report of the sampled firms. Nevertheless, in testing the research hypothesis, the ordinary least square (OLS) will be used to estimate the regression analysis.

#### **Model specification**

Below, is the model is used to assess the link between the independent (exogeneous) and the dependent(endogenous) variables of the retrieved non-finance listed firms in Nigeria.

This can be explicitly restated as:

 $DIP_{it} = \beta_0 t + \beta_1 ASP_{it} + \beta_2 EYV_{it} + \beta_3 MVAA_{it} + \beta_4 PRV_{it} + \beta_5 TOBQ_{it} + \mathcal{E}_{it}....(2)$ 

Where:

DIP<sub>it</sub>= Dividend Payout ratio for non-finance listed firms i at period t (in years);

ASP<sub>it</sub> = Aggregate Asset Share prices (ASP)i at period t (in years) for the 15 non-financial listed firms;

EYV<sub>it</sub>= Earnings Yield of Firms Value i at time t (in years) for the 15 non-financial listed firms;

MVAA<sub>it</sub>= Market Value Added Firm Value i at time t (in years);

PRV<sub>it</sub> = Price to revenue Firm Valuation i at time t (in years);

TOBQ it = Tobin Q\_Performance Data is the ratio of the market value of assets to the book value of assets for firms *i* at time *t*.

 $\mathcal{E} = \text{Error or stochastic term}$ 

#### Empirical analysis

Table 2 is a summary of the descriptive statistics of the variables (explained /dependent and the independent/explanatory) which provides their necessary information or brief descriptive coefficients in a given dataset (Hayes,2021) and also highlights the nexus between selected variables used in the study.

 Table 2: Descriptive Statistics

Variables	No of observation	Minimum statistics	Maximum Statistics	Mean Statistics	Standard Deviation	Median Statistics
DIP	150	-155.3718	332.6628	51.27620	61.78476	40.70675
ASP	150	0.500000	1460.000	102.1777	242.6840	29.21000
EYV	150	20.91470	113.8982	9.711654	12.18533	8.114500



MVAA	150	-0.220500	10.77880	1.148641	2.050717	0.310900
PRV	150	0.059400	7.146300	1.434355	1.439074	0.818900
TOBQ	150	0.502400	11.29860	2.007428	2.017629	1.161500

Source: Author's Computation EViews (2021).

#### **Interpretation of Results**

- i. Dividend payout ratio (DIP) as the dependent variable has a mean (average) of 51.276, a maximum of 332.6628 and a minimum of -155.3718. This can be interpreted to mean that on average, firms pay an average of 51 percent of their net profits as dividends.
- ii. Aggregate Asset Share prices (ASP) as independent /explanatory variable, has a mean of 102.1777, a maximum value of 1460.000, and a minimum value of 0.500000. This indicates that the selected firms 2010-2019) incur a nominal average of 102.177 on share prices of assets.
- iii. Earnings Yield of Firms Value (EYV) as an explanatory variable, has a mean of 9.711654, a maximum value of 113.8982, and a minimum value of 20.91470. This indicates that the mean firm's Earning yield is at an average percentage of 9.7.
- iv. Market Value Added Firm Value (MVAA) during the period (2010-2019), has a mean average of 1.148641; maximum statistics of 10.77880, and minimum statistics of -0.220500. The mean statistics depict that the market value of the firms is held at 1.1%.
- v. Price to Revenue Firm Valuation (PRV) during the period (2010-2019) with a mean average of 1.434355; maximum value of 7.146300 and a minimum price to revenue at 0.059400. This shows that the mean statistics of the price revenue and firm value is at an average of 1.4%.
- vi. Tobin Q\_Performance Data (TOBQ) which represents the ratio of the market value of assets to the book value of assets for firms, has a mean of 2.007428; a maximum statistical value of 11.29860 and a minimum of 0.502400. This analysis indicates that the average ratio of the market value to book value of assets for the selected firms is at 2%.

 Table 3. Panel Data Regression Model Results (Ordinary Least Square Estimate)

Dependent Variable: LDIP

Variables	Coefficient	Standard Error	<b>T-Statistic</b>	Prob.
С	-3.12E-15	3.86E-16	-8.085394	0.0000
LASP	8.84E-16	1.20E-16	7.388348	0.0000
LEYV	-5.99E-16	1.10E-16	-5.459226	0.0000
LMVAA	0.000000	1.19E-16	0.000000	1.0000
LPRV	1.000000	2.77E-16	3.62E+15	0.0000
LTOBQ	0.000000	6.44E-17	0.000000	1.0000
R <sup>2</sup>	1.000000	Mean dependent v	zar	0.639831
Adjusted R <sup>2</sup>	1.000000	S.D. dependent va	r	0.710649



S.E. of regression	7.08E-16	Akaike info criterion	-66.87580
Sum squared resid	4.96E-29	Schwarz criterion	-66.72415
Log-likelihood	3516.980	Hannan-Quinn criterion	-66.81435
F-statistic	2.10E+31	Durbin-Watson stat	0.740827
Prob(F-statistic)	0.000000		

Source: Author's Computation, EViews 9(2021).

#### **Interpretation of Results**

From the computation of the OLS models, we will establish the relation between the logged explanatory variables i.e. ASP, EYV, MVAA, PRV, and TOBQ and the logged dependent (explained variable; Dividend Payout Ratio) variable.

-*Coefficients*: The Aggregate asset share prices; LOGASP (8.84 units) and LOGMVAA (0.000000), LOGPRV at 1.000000 and (Log)Tobin Q performance data of 0.0000 is significant to dividend payout ratio (DIP) while LOGEYV (-5.99units) is insignificant to the dividend payout ratio(logged) of the 15 selected non -finance listed firms in the Nigeria Stock exchange.

-*R*-squared Stat.: the independent variables in the model, combined explained about 100% of the systematic variations in the dependent variable (dividend payout ratio) leaving zero unexplained. This depicts that the regressed model is excellent for the analysis.

Interestingly, in the Adjusted R-square, logged independent variables in the degree of freedom presented an explanatory power of 100% which has filled in the gap of knowledge proving that the variables in the analysis are econometrically significant to the dividend payout ratio.

*-T-statistic*: Based on the individual relevance of the model as shown by the t-Statistic values LOGASP (7.388348) and LOGPRV at 3.62, significantly impacts on LDividend Payout Ratio as the values are > 0.05 level of significance while LogMarket Value (0.000000) LOG Earnings Yield (EYV; -5.45), LOGPRV (-0.504126) and LOGTOBQ (0.000000) are insignificant (at 5%) to Log DIP of the 15 non-finance listed companies

-*Prob*(*F*-*Statistics*): the logged independent variables show an estimate at 0.0000 are statistically significant to the Dividend Payout Ratio (LDIP; explained variable).

The apriori expectation shows that the results are random and the next outcome cannot be deduced as its framework for the probabilities is constrained to the result. However, the Durbin-Watson test will not be considered because no correlation test on the error terms was carried out at first order difference.

# POLICY IMPLICATION AND RECOMMENDATIONS

The outcome of the analysis should be a foundation for more research on dividend irrelevance theory that will be in agreement with the modern views of dividend policy, which emphasizes the role of dividend policy in resolving agency problems and thus promoting the value of shareholders.

Despite the data analysis producing compelling results MM's irrelevance theorems on financial theory cannot be understated, as dividend policy research encounters a series of limitations. The Overview of existing literature on listed non-financial industries in the Nigeria stock exchange, is still a concern as most researchers and finance analysts aim to proffer a lasting solution to issues of insider information, lack of openness and accuracy of balance sheets of these companies, high tax rates on declared dividends, amongst macroeconomic factors such as inflation, interest rates, exchange rates index. If Non-financial listed firms retain resources in excess for productive projects (i.e., the company does not pay enough dividends), the cash retained within the business may



be misused by the management. Misuse may arise from investing in projects (or paying more in managerial compensation) that will not increase shareholder wealth, resulting in overinvestment. The potential overinvestment of resources that could have been paid out as dividends is known as the "free-cash flow problem." For instance, if *too much* cash is paid out in dividends, some shareholder-wealth-increasing projects may not be pursued by the company due to scarcity of capital (i.e., underinvestment may occur. Cross-listed companies are likely to pay out more of their free cash flow than non-cross-listed companies, which can prevent managers from misusing the resources in ways that may not maximize shareholder wealth.

In furtherance, paying larger dividends reduces the discretionary internal cash flow and forces the firm to seek external financing from capital markets and the scrutiny and disciplining effects of investment professionals (Easterbrook (1984)).

More importantly, the synergy between qualified professionals and state-of-the-art technology (man and machine) can aid in monitoring and checkmating imperfections in non–financial listed firms in NSE, enhancing optimal corporate policy decisions to simply deliver the full present value of free cash flows to investors.

Thence, when dividend policy is treated as a financing decision, the payment of cash dividends translates to passive residual (Walter, 1963).it is therefore recommended that dividend payment becomes relevant to shareholders of firms.

# CONCLUSION

This research empirically assessed the link between dividend payout ratio (dependent variable) and share asset prices, market value, pricing valuation, earning yield and Tobin q performance data (independent) of 15 selected non-finance firms in the Nigeria Stock Exchange from 2010-2022, under the umbrella of the dividend irrelevance theory. The regressed result establishes that all the independent variables utilized in the study have a significant relationship with the dividend payout ratio. From the above findings that sprang from this work, the following recommendations must be studied and implemented for the benefit of major shareholders, potential and mature investors, policymakers and financial regulators for the promulgation of non-finance listed companies listed in the Nigerian stock exchange (officially, Nigeria Exchange Group)

# REFERENCES

- Abdulsalam N. K., Abubakar S.Y. & Ali, B. K. (2019). Corporate Social Responsibility and Performance of Non-Financial Firms Quoted on Nigerian Stock Exchange IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 21, Issue 6, PP 44-50; www.iosrjournals.org DOI: 10.9790/487X-2106054450 www.iosrjournals.org.
- Adnan, A., Farzand, A. J. & Meryam, A (2015). The impact of dividend policy on firm performance under high or low leverage; evidence from Pakistan. Journal of Management Info Vol. 2, No. 4, p.16-24: ISSN:2313-3376 www.readersinsight.net/jmi
- 3. Adelegan, O.J. (2001): An Empirical Analysis of the Relationship between Cash flows and Dividend Changes, A paper presented at the 23rd Annual Congress of the European Accounting Association, Munich, Germany.
- 4. Akani, H. W.& Sweneme, Y. (2016). Dividend policy and the profitability of selected quoted manufacturing firms in Nigeria: An empirical analysis. Journal of Finance and Accounting, 4(4): 212-24.
- 5. Al-Malkawi, Husam-Aldin Nizar, Michael Rafferty, and Rekha Pillai (2010). "Dividend policy: A review of theories and empirical evidence." International Bulletin of Business Administration 9, no. 1: 171-200.
- Ayunku, P.E. & Mark Jackson, D (2019). Determinants of dividend payout policy of listed corporations in Nigeria: Business, management and economics research ISSN (e): 2412-1770, ISSN (p): 2413-855x vol. 5, issue. 9, pp: 134-141, Academic Research Publishing Group.
- 7. Baker, H. (2009) Dividends and dividend policy; John Wiley & Sons, Vol. 1. Kent, ed.
- 8. Baskin, Jonathan Barron. "The development of corporate financial markets in Britain and the United States, 1600–1914: overcoming asymmetric information." Business History Review 62, no. 2 (1988): 199-237.



- 9. Bhattacharya, S. (1979) Imperfect information, Dividend policy, and 'the bird in the hand fallacy," Bell Journal of Economics vol. 10, p. 259-270.
- 10. Black, F. and Scholes, M., (1974). The effects of dividend yields and dividend policy on common stock prices and return, Journal of Financial Economics, 1, (1): (May).
- 11. Brittain, J.A. (1964): The Tax Structure and Corporate Dividend Policy, American Economics Review. 54(3): 272-282
- 12. Chariton A, Vafeas, N. (1998). The Association between Operating Cash Flows and Dividend Changes: An Empirical Investigation, Journal of Business Finance and Accounting. 25(4): 225.
- 13. De Angelo, H., DeAngelo, L. (2006). The irrelevance of the MM dividend theorem, Journal of Financial Economics, 79, 293-315.
- 14. Dhillon, U.S and H. Johnson (1994). Corporate Dividend Behavior with Special Emphasis on Growth and Controlled Companies, Unpublished Doctoral Dissertation, Indian Institute of Management, Ahmedabad 25-30.
- 15. Enekwe, C. I., Nweze, A. U., & 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 Vol.3, No.11, pp.40-59, Published by European Centre for Research Training and Development UK (www.eajournals.org) 40 ISSN 2053 - 4086(Print), ISSN 2053 -4094(Online)
- 16. Easterbrook, F., (1984). Two agency-cost explanations of dividends. American Economic Review 74, 650-659.
- 17. Gordon M. J. (1963) Optimal Investment and Financing Policy: Journal of Finance, p. 264-272.
- Hauser, R. (2013) 'Did Dividend Policy Changed during Financial Crises,' Managerial Finance, 39(6), 584-606
- 19. Hutchinson R.W. (1995). The capital structure and investment decision of the small owner-managed firm: some exploratory issues, Small Business Economics, 76, 231-239.
- Inyiama, C. E., Mary, O. & Inyiama, O. I. (2015). Dividend payout policy determinants of selected listed brewery firms in Nigeria: A meta-analysis 2000-2013. European Journal of Business, Economics and Accountancy, 3(3): 101-18.
- 21. Isibor A., Modebe, N.J., Okoye, L. U. and Ado, A. (2017) Dividend Policy And Value Of The Firm: Is Dividend Relevant Or Not? ESUT Journal of Accountancy, Vol. 8, No. 1.
- James E.W. (1963) Dividend Policy its effluence on the value of enterprise journals of finance-18th May P. 280
- 23. Jensen Michael. C., & William M. (1976) 'Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure', Journal of Financial Economics, Vol. 3, p. 305-60
- 24. Jensen, M. C. (1986) "Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers", American Economic Review 7(2), 1986, p6. 323-329
- 25. John, K., & Williams, J. (1985) "Dividends, dilution, and Taxes: A signalling Equilibrium." Journal of Finance 40(4), p. 1053-1070.
- 26. Kajola, S.O. & Adewumi, A. A. (2016). Dividend Payout Policy and Financial Performance: Evidence from Nigerian Listed Non-Financial Firms.
- 27. Kindleberger, Charles P (2015). A financial history of Western Europe. Routledge.
- 28. Lintner, J. (1950). Distribution of income and dividends among corporations retained earnings and taxes", American Economic Review. 46, (2): 97-113.
- 29. Lintner, J. (1956). Optimal Dividends and Corporate Growth under Certainty. The Quarterly Journal of Economics 78(3), 49-95.
- 30. Lintner, J. (1962), "Dividends Leverage, Stock Prices, and the Supply of Capital of Corporations", Review of Economics and Statistics, p. 243-269.
- 31. Loon, H. W. V. (1913). The fall of the Dutch Republic. London Constable & Co. Limited.
- 32. Maheshwari, S.N. (1999) Elements of Financial Management, Sultan Chand & Sons, New Delhi, p. C. 74
- 33. Mwangi, L., Makau, M., & Kosimbei, G. (2014). The Relationship between Capital Structure and Performance of Non–Financial Companies Listed in Nairobi
- 34. Miller, M. H., & Modigliani, F. (1961) "Dividend Policy, Growth and the Valuation of Shares: Journal of Business 34(4) p. 411-433.



- 35. Miller, M., & Kevin R. (1985), Dividend Policy Under Asym0metric Information, Journal of Finance, vol. 40, p. 1031-1051
- 36. Moyer, M.C & Guigan K. (2001) Contemporary Financial Management, Eight edition, Southwestern College Publishing, p. 516.
- 37. Moon, J., Lee, W. S. & DATTILO, J. (2015). Determinants of the payout decision in the airline industry. Journal of Air Transport Management, 42(C): 282-88.
- Muhammad. M., Manzoor, M.I., Ullah, Z., Haroon, R. & Abdul, B. (2018). "An Analytical Review of Dividend Policy Theories" Journal of Advanced Research in Business and Management Studies" 11, no. 1: 62-76.
- 39. Myers S.C. (1977). Determinants of capital borrowing, Journal of Finance Economics, 5,5147-5175.
- 40. Myers S.C. and Majluf N. (1984). Corporate financing and investment decisions when firms have information that investors do not have, Journal of Financial Economics, 13, 187-221.
- 41. Nazir, M. S., Muhammad M. N., Anwar, W., & Farhan, A. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy. International Research Journal of Finance and Economics, 55, 1450-2887.
- 42. Ogundajo, G. O., Enyi, P. E., Akintoye, I. R. and Dada, S. O. (2019). Accounting information and dividend payout prediction in Nigerian listed manufacturing firms. Journal of Accounting and Taxation, 11(1): 9-16.
- Okoro, C. O., Ezeabasili, V. & Alajekwu, U. B. (2018). Analysis of the determinants of dividend payout of consumer goods companies in Nigeria. Annals of Spiru Haret University, Economic Series, 1(1): 144-65.
- 44. Oladipupo, A. O.& Ibadin, O. P. (2013). Does Working Capital Management Matter in Dividend Policy Decision? Empirical Evidence from Nigeriawww.sciedu.ca/ijfr International Journal of Financial Research Vol. 4, No. 4; Published by Sciedu Press ISSN 1923-4023 E-ISSN 1923-4031Online doi:10.5430/ijfr.v4n4p140 URL: http://dx.doi.org/10.5430/ijfr.v4n4p140.
- 45. Olaniyi, C., Simon-Oke, O.& Bolarinwa. T.S. (2017). Re-examining Firm Size-profitability Nexus: Empirical Evidence from Non-financial Listed Firms in Nigeria. Article in Global Business Review; see discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/315493810.
- 46. Padron Y.G., Apolinario R.M.C., Santana O.M., Marlel V.C.M. and Sales L.J. (2005). Determinant factors of leverage: An empirical analysis of Spanish corporations, Journal of Risk Management, 6, 60-68.
- 47. Pandey I.M. (2011). Financial Management, Vikas Publishing House PVT Ltd., India. 776.
- 48. Paseda, O. (2020). The Determinants of Dividend Payout Ratios of Nigerian Non-financial Firms. 123 Nigerian Journal of Management Studies Special Edition Vol. 20, No.1, pp. 123-135
- 49. Ronald C. L., Kose J., Avner K., Uri L., & Oded H. S. (2000). Dividend Policy: Its Impact on Firm Value, Harvard Business School Press, Boston, Massachusetts, p. 29
- 50. Rule 702 of the Federal Rules of Evidence of 200 of the U.S.A.
- 51. Rustagi, R.P. (2001). Financial Management, Galgotia Publishing Company, p. 806.
- 52. Sarbanes-Oxley Act of 2002.
- 53. Securities Act of 1933.
- 54. Securities and Exchange Act of 1934.
- 55. Salawudeen, A., Muhammed, A.I. & Salaudeen, M. Y. (2020). Shareholders' Preference and Dividend Policy: An Empirical Analysis Of Listed Industrial Goods Companies In Nigeria; Article in Research Journal of Finance and Accounting DOI: 10.7176/RJFA/11-24-08.
- 56. Scott, W. R. (1912). The Constitution and Finance of English, Scottish, and Irish Joint Stock Companies to 1720. Vol. 1. Cambridge.
- 57. Walter, J.E. (1956) "Dividend Policy and Common Stock Prices" University of California Berkeley.
- 58. Williams, J. (1988) "Efficient Signalling with Dividends, Investment and stock repurchases." Journal of Finance 43, no.3, July 1988, p. 737-747.



# APPENDIX

# **Empirical Review**

Author(s)	Year	Region	Nation	Sector	Period	Unique firm sample	N	Estimation	Dependent V . Proxy	Indep V .group (hypothese)	Independent V. proxy	Findings
Isibor, A.,Modeb e,N. J.,. Okoye, L. U.,Ado,A.	2017	Africa	Nigeria	Non- Financi al and Financi al	1995- 2015	Public Limited Companie s	10	Ordinary Least Square regression analyses(pri mary data) and multiple regression analyses (secondary data)	Market Price Per Share (MPS)	Firms value	Earnings Per Share and Dividend Per Share contributions to MPS	Firms Value is influnced by dividend policy as far as public limited companies are concerned
Abdulsala m, N.K. Abubakar, S.Y. and ALI. K.	2019	Africa	Nigeria	Non- financi al Compa nies	2006- 2016	Non- financial firms Quoted on the Nigerian Stock Exchange	40	Panel data regression technique	Return On Asset & Returns On Equity	Firms Performanc e	Corporate Social Responsibity (CSR), Firm size, Leverage, Business Risk	Positive/si gnificant relationshi p between Depandent Variable and Independe nt Variable
Akani, W.H. &Swenem e,Y.	2016	Afica	Nigeria	Manuf acturin g sector	1981- 2014	Selected manufactu ring firms	15	Multiple regression estimation technique	Net profit margin (NPM) and Return On Investment (ROI)	Profitability	Dividend payout ratio(DPR) Dividend yield(DY) Earning Per Share (EPS), Retention Ration(RR)	Negative (DY to ROI & NPM), while Positive (RR, DPR and EPS to NPM&RO I)
Ayunku,P. E. & Markjacks on,D.	2019	Africa	Nigeria	Non- Financ e Firms	2007- 2017	Selected non financial firms	94	Panel regression technique	Dividend Payout	Dividend	Liquidity, Firm size and profitability	Negative
Okoro et al	2018	Africa	Nigeria	Consu mer goods industr y	2006- 2015	Selected consumer goods firms	9	Multiple Regression	Dividend Payout Ration (DPR)	Profitability	Market Value(MV), Profitability, Leverage, historical dividend (HD)	Positive (MV and HD to DPR) ,while Negative( leverageto DPR)



#### INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS) ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

Moon et al	2015	Africa	kenya	Aviatio n	2000- 2012	Selected Airlines	46	Logistics Regression	Dividend Payout Ratio and Share repurchase	Profitability	Total asset size (Total Cash to total asset) leverage(total debt to total assets)	Positive (Betwwen Dv and the IV's)
Ogundajo et. Al	2019	Africa	Nigeria	Manuf acturin g	1997- 2016	Selected Production Companie s	36	Panel Fixed effect technique	Dividend Payment	Leverage	Leverage, EPS,sales growth, operating cash flow, lag of dividend and firm size	Postive (lag of dividend, sales growth to Dividend Payment). While Negative( EPS, Operating cash flow and firm size to Dividend payment)
Inyiama et al	2015	Africa	Nigeria	Brewer ies	2000- 2013	Selected Breweries firms	2	Ordinary Least Square Technique( OLS)	Dividend Pershare	Profitability	Market Per Share(MPS), Total Assets (Firm Size), Net asset value per share, Retained Earnings, EPS	Positive (MPS and EPS to Dividend per share). Negative ( Retained Earnings, Firm size and Net asset value to Dividend Per share)
Rashid & Rehman	2008	Asia	Bangla desh	Non Financi al Firms	1999- 2006	Selected Non- Financial companies	##	Panel Data	Dividend Yield per share	Market Capitalizati on	Stock prices and Stock Price Volatility	Negative relationshi p between DV and IV's
Nazir et. Al.	2010	Middle East/A sia	Pakista n	Non Financi al Firms	2003- 2008	Selected Non- Financial firms	73	Panel Data	Dividend policy	Market Capitalizati on	Stock price fluctuation	Negative relationshi p between DV and IV's
Enekwe,C .I., Nweze ,A.U & Agu,C.I.	2015	Africa	Nigeria	Cemen t Industr y	2003- 2014	Quoted Cement companies	N ot sp ec	Panel data	Dividend Payout Ratio (DPR)	Profitability	Returns On Asset (ROA), Returns on Equity (ROE), Return of	Positive (ROA & ROCE TO DPR). Negative



#### INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS) ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

							ifi ed				Capital Employed+L 17	(ROE to DPR)
Oladipupo & Ibadin	2013	Africa	Nigeria	Manuf acturin g Sector	2002- 2006	Manufactu ring	12	Pearson Product Correlation and OLS technique	Working Capital (DPR)	Profitability	Net trade cycle, Current ratio and Debt ratio	PosItive (Dpr by profitabilit y). Negati ve (Net trade cycle by growth rate earnings)
Kajola, S.O. & Adewumi, A.A.	2016	Africa	Nigeria	Non- Finana cial Sector	2004- 2013	Non Financial Firms	25	Pooled Ordinary Least Square (OLS) estimation method	Dividend payout ratio(DPR)	Profitability	Return on Asset (ROA)	Positive relationshi p between DPR and ROA
Nwangi,L. Makau,M. and kosimbei, G.	2014	Africa	Nairobi , Kenya	Non financi al compa nies	not specifi ed	Non financial firms	no t sp ec ifi ed	Panel data and feasible generalised least square regression	Financial Leverage	Profitability	Returns on Assets	Negative relationshi p between Financial leverage and ROA
											ROA) and Returns on Equity	
Paseda , O. A.	2020	Africa	Nigeria	Non- Financi al listed Firms	1999- 2019	Non Financial Firms in the Nigeria Stock Exchange	50	panel data regression techniques such as two- stage least squares (2SLS), generalized method of moments (GMM) and GARCH	Dividend Pay out	key finding of this study is that dividend is an increasing function of the following firm- specific variables namely: book leverage, short-term debt usage,	information asymmetry, agency, transactions and bankruptcy costs affect payout ratios	Var Exp t. sign Pro xy LNS Positive Size QUIC K Positiv\ e Agen cy Costs ML N egative Agency Costs



					marginal tax rate, firm size and profitability while the attributes that exert negative influences on payout are market leverage, asset tangibility, earnings volatility, firm uniqueness, financing deficit and age.	BL Po sitive info rmation Asymmetr y DMS Pos itive Financial Flexibility MTR Po sitive De bt Tax Shield advantage NDTS P ositive/Ne gative DebtCom plements/ Substitute TANG P ositive Financia l Flexibility GROW Negativetr ansaction costs RD Posi tive Inf ormation Asymmetr y VOL Negative
						y VOL Negative Busine ss risk/ Dividend smoothing PROF Po sitive Inf ormation Asymmetr y UNQ Ne gative Ba nkruptcy costs



						DEF Ne gative Inf ormation Asymmetr v
						MKTTIM Positive Infor mation Asymmetr v
						AGE Po sitive/Neg ative Inf ormation Asymmetr y
						RAT P ositive
						Financial Flexibility (pp129- 131)



Source: Author's Computation (2021)

Descriptive stat.

	DIP	ASP	EYV	MVAA	PRV	TOBQ
Mean	51.27620	102.1777	9.711654	1.148641	1.434355	2.007428
Median	40.70675	29.21000	8.114500	0.310900	0.818900	1.161500
Maximum	332.6628	1460.000	113.8982	10.77880	7.146300	11.29860
Minimum	-155.3718	0.500000	-20.91470	-0.220500	0.059400	0.502400
Std. Dev.	61.78476	242.6840	12.18533	2.050717	1.439074	2.017629
Skewness	1.151511	4.033561	4.693244	2.367761	1.418291	2.354604
Kurtosis	8.548100	19.55824	38.69475	8.496818	4.513860	8.411621
Jarque-Bera	225.5333	2120.336	8513.883	329.0011	64.61230	321.6393
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	7691.430	15326.66	1456.748	172.2961	215.1532	301.1142
Sum Sq. Dev.	568786.1	8775431.	22123.87	626.6105	308.5692	606.5532
Observations	150	150	150	150	150	150

Dependent Variable										
Method: Panel Leas	Method: Panel Least Squares									
Date: 07/19/21 Tin										
Sample: 2010 2019										
Periods included: 10	)									
Cross-sections inclu	ided: 14									
Total panel (unbalar	nced) observ	vations: 105								
Variable	Coefficient	Std. Error	t-Statistic	Prob.						
С	-3.12E-15	3.86E-16	-8.085394	0.0000						
LASP	LASP 8.84E-16 1.20E-16									
LEYV	-5.99E-16	1.10E-16	-5.459226	0.0000						



LMVAA	0.000000	1.19E-16	0.000000	1.0000
LPRV	1.000000	2.77E-16	.77E-16 3.62E+15	
LTOBQ	0.000000	6.44E-17	44E-17 0.000000	
R-squared	1.000000	Mean dep	0.639831	
Adjusted R-squared	1.000000	S.D. deper	0.710649	
S.E. of regression	7.08E-16	Akaike in	-66.87580	
Sum squared resid	4.96E-29	Schwarz c	eriterion	-66.72415
Log-likelihood	3516.980	Hannan-Q	uinn criteria.	-66.81435
F-statistic	2.10E+31	Durbin-W	0.740827	
Prob(F-statistic)	0.000000			

Fiscal Year	Companies	DIP	ASP	EYV	MVAA	TOBQ	PRV	Country	Exchange Sector
2010	11 Plc	54.1349	139.3	9.1707	2.4553	4.1509	0.7262	Nig	Oil & Gas
2011	11 Plc	70.6693	147.3775	10.1444	1.3251	2.3039	0 .648	Nig	Oil & Gas
2012	11 Plc	52.2003	122.455	8.7675	0.7818	1.7745	0.4063	Nig	Oil & Gas
2013	11 Plc	51.798	114.175	9.7668	0.6409	1.6172	0.4526	Nig	Oil & Gas
2014	11 Plc	33.8439	148.39	13.4646	0.6892	1.6817	0.5966	Nig	Oil & Gas
2015	11 Plc	48.8398	154.9875	8.446	0.7829	1.7234	0.8984	Nig	Oil & Gas
2016	11 Plc	31.8395	200.4275	8.1052	1.2828	2.146	1.0691	Nig	Oil & Gas
2017	11 Plc	38.3677	228.655	10.7148	0.5735	1.5147	0.5602	Nig	Oil & Gas
2018	11 Plc	30.9227	182.375	13.9466	0.4687	1.4353	0.4064	Nig	Oil & Gas
2019	11 Plc	33.4871	162.35	16.6574	0.1497	1.0766	0.2782	Nig	Oil & Gas
2010	Aluminium Extrusion Indus	0	12.5525	2.223	2.8348	3.8332	1.6834	Nig	Natural Resources
2011	Aluminium Extrusion Indus	21.7614	11.0625	2.0697	1.4891	2.4876	1.4097	Nig	Natural Resources



2012	Aluminium Extrusion Indus	24.3793	10.575	1.9525	0.851	1.8508	1.3418	Nig	Natural Resources
2013	Aluminium Extrusion Indus	8.119	10.5375	5.8908	0.7965	1.7963	1.144	Nig	Natural Resources
2014	Aluminium Extrusion Indus	9.6996	10.4825	7.446	0.6692	1.6684	1.2039	Nig	Natural Resources
2015	Aluminium Extrusion Indus	19.8869	9.975	4.0336	0.4778	1.4927	0.8222	Nig	Natural Resources
2016	Aluminium Extrusion Indus	21.2329	9.4125	4.3184	0.1328	0.7153	0.6819	Nig	Natural Resources
2017	Aluminium Extrusion Indus	22.4178	9.2025	4.1303	0.1875	1.1825	0.7861	Nig	Natural Resources
2018	Aluminium Extrusion Indus	21.5141	8.7	4.8181	-0.0024	0.9892	0.6619	Nig	Natural Resources
2019	Aluminium Extrusion Indus	29.2367	8.125	3.5892	-0.0295	0.9649	0.6835	Nig	Natural Resources
2010	B.O.C Gases Nig	34.0187	9.7275	9.5652	1.172	2.0108	1.5659	Nig	Natural Resources
2011	B.O.C Gases Nig	42.554	7.6125	11.6788	0.6754	1.5451	1.2058	Nig	Natural Resources
2012	B.O.C Gases Nig	0	6.1825	11.68	0.3641	1.1949	1.1214	Nig	Natural Resources
2013	B.O.C Gases Nig	12.6733	7.3925	9.4595	0.3305	1.0804	1.328	Nig	Natural Resources
2014	B.O.C Gases Nig	40.5907	5.845	9.8904	0.0773	0.956	1.0308	Nig	Natural Resources
2015	B.O.C Gases Nig	12.3641	4.5625	7.6821	-0.166	0.7549	0.7937	Nig	Natural Resources
2016	B.O.C Gases Nig	13.0949	3.7675	5.1921	-0.1937	0.6262	0.7407	Nig	Natural Resources
2017	B.O.C Gases Nig	3.5585	3.805	11.7336	-0.0938	0.5986	0.7834	Nig	Natural Resources
2018	B.O.C Gases Nig	7.7575	4.3075	20.4067	-0.2026	0.7025	0.6106	Nig	Natural Resources
2019	B.O.C Gases Nig	30.8376	4.885	9.4336	-0.084	0.6173	0.7458	Nig	Natural Resources
2010	Berger Paints Nig	24.5634	6.9375	24.2823	0.0551	0.9795	0.661	Nig	Industrial Goods
2011	Berger Paints Nig	66.7894	9.79	12.3739	0.0417	0.7751	0.7152	Nig	Industrial Goods
2012	Berger Paints Nig	79.2447	8.5825	9.8367	0.0612	0.8036	0.7765	Nig	Industrial Goods
2013	Berger Paints Nig	60.5369	9.67	10.875	-0.0352	0.6429	0.8533	Nig	Industrial Goods



				1	1				
2014	Berger Paints Nig	113.3561	8.875	5.7049	0.0408	0.7809	0.8461	Nig	Industrial Goods
2015	Berger Paints Nig	52.2954	9.915	11.3972	0.0798	0.9256	0.959	Nig	Industrial Goods
2016	Berger Paints Nig	72.5352	7.7275	12.0767	-0.1827	0.6986	0.7126	Nig	Industrial Goods
2017	Berger Paints Nig	60.5975	7.315	10.0088	-0.0419	0.7828	0.7957	Nig	Industrial Goods
2018	Berger Paints Nig	35.4767	8.325	12.8591	-0.0707	0.8149	0.738	Nig	Industrial Goods
2019	Berger Paints Nig	29.7431	7.375	22.9378	-0.2205	0.7367	0.5457	Nig	Industrial Goods
2010	Cadbury Nig	4.0301	24.2325	1.4832	2.3231	3.0919	2.6996	Nig	Consumer Goods
2011	Cadbury Nig	0.3804	16.5975	10.2632	0.5697	1.2131	1.0485	Nig	Consumer Goods
2012	Cadbury Nig	0.2616	20.1425	3.7931	1.7692	2.3399	2.7149	Nig	Consumer Goods
2013	Cadbury Nig	24.1914	49.1275	3.2537	3.7321	4.321	5.1766	Nig	Consumer Goods
2014	Cadbury Nig	161.4122	62.7625	1.8669	2.411	3.2832	2.6551	Nig	Consumer Goods
2015	Cadbury Nig	110.1896	28.67	3.5804	0.7012	1.5109	1.1576	Nig	Consumer Goods
2016	Cadbury Nig	-155.372	14.725	-1.5336	0.2913	1.1852	0.6447	Nig	Consumer Goods
2017	Cadbury Nig	297.0336	12.2575	1.0193	0.6223	1.5309	0.8897	Nig	Consumer Goods
2018	Cadbury Nig	34.9986	11.8	4.3823	0.2218	1.0732	0.5221	Nig	Consumer Goods
2019	Cadbury Nig	40.8228	10.375	5.4042	0.2173	1.0632	0.5039	Nig	Consumer Goods
2010	Chemical & Allied Product	69.661	31.365	9.2655	3.589	3.9976	2.6141	Nig	Industrial Goods
2011	Chemical & Allied Product	52.595	26.1175	12.8965	2.1752	2.5828	1.8849	Nig	Industrial Goods
2012	Chemical & Allied Product	156.8727	24.855	7.1071	5.0691	5.6284	3.0004	Nig	Industrial Goods
2013	Chemical & Allied Product	89.4272	44.115	4.1692	10.7788	11.2986	5.4847	Nig	Industrial Goods
2014	Chemical & Allied Product	105.2679	39.28	6.32	8.1547	8.8005	3.7644	Nig	Industrial Goods
2015	Chemical & Allied Product	80.4802	37.4125	6.6093	7.2742	7.7273	3.7297	Nig	Industrial Goods
2016	Chemical & Allied Product	52.3901	34.6075	7.1578	4.092	4.619	3.2874	Nig	Industrial Goods
		1			1		1		



2017	Chemical & Allied Product	102.7537	31.675	6.2972	4.2995	4.737	3.3455	Nig	Industrial Goods
2018	Chemical & Allied Product	70.8581	34.2625	8.3187	3.4203	3.7327	3.1418	Nig	Industrial Goods
2019	Chemical & Allied Product	116.5399	28.6125	10.3696	2.1119	2.4725	1.9975	Nig	Industrial Goods
2010	Ci Leasing	162.9304	2.4925	5.8824	-0.0221	0.96	0.2199	Nig	Services
2011	Ci Leasing	-26.7649	1.0325	-20.9147	-0.0668	0.9051	0.0868	Nig	Services
2012	Ci Leasing	0	0.5	14	-0.0463	0.9311	0.094	Nig	Services
2013	Ci Leasing	20.0127	0.52	22	-0.1998	0.7555	0.0594	Nig	Services
2014	Ci Leasing	35.4737	0.5	22.0244	-0.2141	0.7229	0.1053	Nig	Services
2015	Ci Leasing	83.7848	0.51	18.4005	-0.1667	0.7849	0.0989	Nig	Services
2016	Ci Leasing	9.0056	0.5	113.8982	-0.1898	0.7845	0.0887	Nig	Services
2017	Ci Leasing	0	1.01	52.6999	-0.1559	0.8165	0.0976	Nig	Services
2018	Ci Leasing	0	2.1475	48.3492	-0.1777	0.7897	0.1278	Nig	Services
2019	Ci Leasing	3.2275	6.6975	39.3873	-0.167	0.7976	0.1068	Nig	Services
2010	Conoil	37.3096	43.8475	11.0318	0.2417	0.997	0.2458	Nig	Oil & Gas
2011	Conoil	46.5034	34.515	13.7143	0.0799	0.7799	0.1382	Nig	Oil & Gas
2012	Conoil	242.647	21.0625	5.0244	-0.0172	0.9059	0.0949	Nig	Oil & Gas
2013	Conoil	22.6036	35.9175	6.5067	0.3538	1.0165	0.2958	Nig	Oil & Gas
2014	Conoil	332.6628	50.605	3.1488	0.1201	0.7603	0.2065	Nig	Oil & Gas
2015	Conoil	30.073	33.0325	13.4137	-0.0073	0.5619	0.2075	Nig	Oil & Gas
2016	Conoil	73.3587	29.195	10.911	0.108	0.5024	0.3059	Nig	Oil & Gas
2017	Conoil	136.284	33.7775	8.1238	0.0245	0.6144	0.1682	Nig	Oil & Gas
2018	Conoil	77.2757	27.15	11.1318	-0.0356	0.7123	0.132	Nig	Oil & Gas
2019	Conoil	70.369	19.9875	15.363	-0.1043	0.7844	0.0919	Nig	Oil & Gas
2010	Flour Mills Of Nigeria	21.4547	64.04	2.6977	0.634	1.5895	0.6982	Nig	Consumer Goods



2011	Flour Mills Of Nigeria	36.3587	75.6625	6.906	0.5319	1.4776	0.573	Nig	Consumer Goods
2012	Flour Mills Of Nigeria	45.7631	60.4175	5.0179	0.3633	1.2506	0.6464	Nig	Consumer Goods
2013	Flour Mills Of Nigeria	52.5278	83.07	3.3843	0.5153	1.4374	0.7561	Nig	Consumer Goods
2014	Flour Mills Of Nigeria	90.7037	61.795	5.2181	0.065	1.0084	0.3097	Nig	Consumer Goods
2015	Flour Mills Of Nigeria	58.8668	28.045	15.5045	-0.0868	0.8224	0.1768	Nig	Consumer Goods
2016	Flour Mills Of Nigeria	25.5812	20.5925	29.7188	-0.1368	0.7276	0.1416	Nig	Consumer Goods
2017	Flour Mills Of Nigeria	33.6256	25.0875	11.6111	-0.0548	0.8519	0.1451	Nig	Consumer Goods
2018	Flour Mills Of Nigeria	20.8478	28.1	22.4608	-0.2204	0.7251	0.1117	Nig	Consumer Goods
2019	Flour Mills Of Nigeria	137.21	16.5	4.952	-0.1684	0.7903	0.1532	Nig	Consumer Goods
2010	Guinness Nig	80.557	164.7975	4.8856	3.1501	3.9833	2.5708	Nig	Consumer Goods
2011	Guinness Nig	73.6232	226.9875	4.862	3.5613	4.4737	2.9817	Nig	Consumer Goods
2012	Guinness Nig	98.9905	250.71	3.5045	3.4619	4.4169	3.4827	Nig	Consumer Goods
2013	Guinness Nig	36.0308	254.6925	3.3382	2.5553	3.529	2.902	Nig	Consumer Goods
2014	Guinness Nig	113.3255	195.7825	3.7808	1.573	2.5255	2.3188	Nig	Consumer Goods
2015	Guinness Nig	60.9991	142.9775	4.2992	1.0877	2.0402	1.5301	Nig	Consumer Goods
2016	Guinness Nig	-111.313	98.6975	-1.6119	0.6088	1.5662	1.2264	Nig	Consumer Goods
2017	Guinness Nig	36.7287	80.255	1.359	0.6752	1.6072	1.1242	Nig	Consumer Goods
2018	Guinness Nig	14.3469	88.4375	4.5854	0.3844	0.9502	1.0247	Nig	Consumer Goods
2019	Guinness Nig	73.4956	43.5375	8.3313	-0.1445	0.8259	0.5005	Nig	Consumer Goods
2010	Julius Berger	102.3499	47.9325	4.6563	0.3488	1.3115	0.3467	Nig	Construction & Real Estate
2011	Julius Berger	49.651	47.025	11.6456	0.1634	1.0947	0.2236	Nig	Construction & Real Estate



2012	Julius Berger	34.656	30.0075	19.7114	0.1425	1.0825	0.2017	Nig	Construction & Real Estate
2013	Julius Berger	36.7981	67.1925	9.2959	0.2792	1.1891	0.3971	Nig	Construction & Real Estate
2014	Julius Berger	37.6699	68.89	10.1055	0.2165	1.1249	0.4143	Nig	Construction & Real Estate
2015	Julius Berger	122.9023	43.5625	4.4014	0.1271	1.0726	0.4143	Nig	Construction & Real Estate
2016	Julius Berger	-51.876	43.5775	-7.4948	0.0988	1.058	0.3664	Nig	Construction & Real Estate
2017	Julius Berger	0	34.19	6.959	0.0249	0.8884	0.2605	Nig	Construction & Real Estate
2018	Julius Berger	21.6657	24.35	22.9979	-0.0308	0.886	0.1363	Nig	Construction & Real Estate
2019	Julius Berger	30.2299	21.9625	27.789	-0.0281	0.8631	0.1183	Nig	Construction & Real Estate
2010	Lafarge Cement Wapco Nig	6.1491	38.05	3.9957	0.6657	1.6214	2.7865	Nig	Industrial Goods
2011	Lafarge Cement Wapco Nig	8.6858	42.465	6.6549	0.4834	1.4085	2.077	Nig	Industrial Goods
2012	Lafarge Cement Wapco Nig	15.3021	49.1325	8.374	0.7063	1.6478	1.9972	Nig	Industrial Goods
2013	Lafarge Cement Wapco Nig	12.7424	93.5	8.189	1.5657	2.439	3.4938	Nig	Industrial Goods
2014	Lafarge Cement Wapco Nig	43.1476	106.94	9.1677	0.6789	1.633	1.8367	Nig	Industrial Goods
2015	Lafarge Cement Wapco Nig	48.7746	86.5425	6.1101	0.5865	1.5501	1.6535	Nig	Industrial Goods
2016	Lafarge Cement Wapco Nig	8.8985	59.815	7.8309	-0.066	0.8957	0.9822	Nig	Industrial Goods
2017	Lafarge Cement Wapco Nig	-47.0525	46.4625	-14.015	0.1556	1.0683	0.8253	Nig	Industrial Goods
2018	Lafarge Cement Wapco Nig	-134.579	30.225	-8.1509	-0.0491	0.9277	0.3501	Nig	Industrial Goods



2019	Lafarge Cement Wapco Nig	27.1984	13.85	6.2965	-0.1981	0.7474	1.157	Nig	Industrial Goods
2010	National Aviation Handling	73.1486	10.47	9.4118	1.0176	1.8985	1.9716	Nig	Services
2011	National Aviation Handling	89.3149	6.955	13.2296	0.0578	1.0067	0.802	Nig	Services
2012	National Aviation Handling	51.854	6.375	7.6067	0.2152	1.1405	1.0545	Nig	Services
2013	National Aviation Handling	48.5962	6.74	9.0323	0.1895	0.9392	1.0392	Nig	Services
2014	National Aviation Handling	77.9115	5.0325	7.8629	0.0961	0.9108	0.889	Nig	Services
2015	National Aviation Handling	54.9115	4.625	8.7595	0.0029	0.8565	0.7224	Nig	Services
2016	National Aviation Handling	55.9382	3.66	11.3145	-0.0965	0.6715	0.645	Nig	Services
2017	National Aviation Handling	46.0613	3.0575	12.0006	-0.025	0.7816	0.8156	Nig	Services
2018	National Aviation Handling	206.3351	3.705	3.3195	-0.032	0.7494	0.6034	Nig	Services
2019	National Aviation Handling	56.6168	2.8325	18.3986	-0.1861	0.7077	0.39	Nig	Services
2010	Nestle Nig	55.5605	339.4125	5.177	3.7874	4.7348	2.9425	Nig	Consumer Goods
2011	Nestle Nig	53.5105	418.04	4.6695	4.2465	5.2327	3.6064	Nig	Consumer Goods
2012	Nestle Nig	41.8653	535.8875	3.81	5.8518	6.809	4.7536	Nig	Consumer Goods
2013	Nestle Nig	72.7397	1025.008	2.3404	8.4141	9.2873	7.1463	Nig	Consumer Goods
2014	Nestle Nig	117.4018	1075.438	2.7726	7.2225	8.1875	5.5953	Nig	Consumer Goods
2015	Nestle Nig	68.0198	857.9975	3.4821	5.3993	6.2908	4.5064	Nig	Consumer Goods
2016	Nestle Nig	253.3953	796.25	1.2343	3.6039	4.3011	3.5295	Nig	Consumer Goods
2017	Nestle Nig	33.8886	1106.775	2.7343	8.0957	8.9926	5.0516	Nig	Consumer Goods
2018	Nestle Nig	103.5951	1460	3.6537	6.9417	7.8446	4.4206	Nig	Consumer Goods
2019	Nestle Nig	107.2679	1458.7	3.9209	5.7896	6.7536	4.102	Nig	Consumer Goods



#### INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS) ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

2010	Okomu Oil Palm	8.7813	15.725	22.5	0.1587	1.0958	1.1892	Nig	Agriculture
2011	Okomu Oil Palm	24.3111	18.5225	17.7802	0.1309	1.0083	1.9844	Nig	Agriculture
2012	Okomu Oil Palm	53.1313	34.255	8.8439	0.4853	1.359	4.0017	Nig	Agriculture
2013	Okomu Oil Palm	159.5797	52.625	4.9773	0.6462	1.6068	4.7441	Nig	Agriculture
2014	Okomu Oil Palm	61.4057	33.8125	6.43	0.0299	1.0792	2.7912	Nig	Agriculture
2015	Okomu Oil Palm	9.0637	29.225	9.1115	0.8384	1.7906	2.9652	Nig	Agriculture
2016	Okomu Oil Palm	1.9427	35.005	12.8143	0.8694	1.7389	2.6676	Nig	Agriculture
2017	Okomu Oil Palm	15.6415	59.8475	14.1673	1.277	2.1784	3.1868	Nig	Agriculture
2018	Okomu Oil Palm	33.6601	79.475	11.6964	1.1498	2.0424	3.5882	Nig	Agriculture
2019	Okomu Oil Palm	94.4533	63.6375	9.5209	0.5472	1.4857	2.8111	Nig	Agriculture