# Determinants of Dividend Policy of Manufacturing Firms in Nigeria

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## **Abstract**

The study set out to identify the determinants of dividend policy of firms in Nigeria from 1984 to 2020. Using the modified Lintner model as the theoretical framework, we analyze data on listed Nigerian manufacturing firms for 1,101 firm-years from 1984 to 2020. Data on dividend, profit after tax, total distributable earnings, leverage, turnover growth, firm size and market to book value were obtained from annual reports of firms. Results of sectoral analysis show that manufacturing firms' dividend policies depend on profit after tax, preceding year dividend, size and growth of firms. The results also show that the manufacturing firms' dividend payout depends more on profit after tax and past dividend and in general the objectives of the firm. However, there is enough evidence to conclude that profit after tax and past dividend are key determinants of firm dividend payment in Nigeria. There is need for firms to improve on their performance and increase their profitability level to have enough to transfer to revenue reserves for future dividend payments, especially when there is recession in the economy, as dividend payment is a key factor in growing investors' confidence, and in enhancing the market values of firms.

**Keywords:** Dividend, Profit, Total distributable earnings, Leverage, Market to book value

## 1. Introduction

The main objectives of firms are profit maximization, growth in the short- or long-term, increase in market share, satisficing and maximiz ation of shareholders wealth. The dividend policy of a firm depends on the firm's objectives. A firm that aims to maximize growth would choose a different dividend policy from a firm that aims to maximize profit. As a result, a clear understanding of determinants of dividend policy reflects different firms' objectives.

When a firm pays cash dividend or omits such a payment, the firm is making an extremely visible and qualitative change in corporate policy. The decision may have short and long-term effects on the price and volume of the company's shares (Naranjo et al., 1998; Amihud and Murgia, 1997; Michaely et al., 1995; Dhillon and Johnson, 1994). An optimal dividend policy should ensure that the wealth of the shareholders is maximized. This will, in turn, help in mobilizing resources to productive investment opportunities on the stock market and ultimately result in economic growth (Adelegan, 2007). For Nigerian corporate firms to continue to harness funds from local and foreign investors to viable investment opportunities that will bring about economic growth, it is expected that they will maintain an optimal dividend policy. This has led researchers in this area to seek to identify the determinants of dividend policy of corporate firms in Nigeria.

The study of dividend policy started to receive attention among academic scholars in Nigeria in 1974 when Uzoaga and Alozienwa (1974) attempted to highlight the pattern of dividend policy pursued by Nigerian firms, particularly since the period of indigenization and participation programme. They concluded that fear and resentment seemed to have taken over from the classical forces. Subsequent studies by Inanga (1978) and Soyode (1975) questioned certain conclusions made by Uzoaga and Alozienwa (1974) as inadequate, or a product of mistaken evaluations. Other studies on dividend policy in Nigeria include Oyejide (1976), Odife (1977), Izedonmi and Eriki (1996), Adelegan and Inanga (2001), Adelegan (2000, 2003 2006, 2007, 2009), Adesola and Okwong (2009), Nwodibie (2013), Adediran and Alade (2013), and Adelegan et al. (2015). They found that there was a significant positive relationship between dividend policies of organizations and profitability, investments and earnings per share and share prices, cashflow, previous level of dividend and revenue. Previous studies in Nigeria have examined dividend policy with limited scope and data, or with focus on non-manufacturing sectors, financial and services sectors and market

reactions, among others. Over the years, there have been some policy changes that have implications for corporate firms and economic growth in Nigeria.

This study takes note of the divergent and inconclusive position on determinants of dividend policies globally and particularly Nigeria. It seeks to improve on previous studies by using more recent data in light of new policy pronouncements to study the dividend behaviour of corporate manufacturing firms listed on the Nigerian stock market. Furthermore, the manufacturing sector is an engine of growth in any economy and plays a critical part in the diversification effort of the Nigerian economy from oil exports. The share of manufacturing as a proportion of GDP has almost tripled from about 5% in 1984 to 13% in 2020. This makes manufacturing an important sector to study in Nigeria as a pathway to sustainable growth.

Our study uses a comprehensive and recent data set covering 151 listed manufacturing firms over the period 1984 to 2020 and recent policy changes that have implications for manufacturing firms and economic growth. This study seeks to provide the answers to the following questions:

What determines dividends of manufacturing firms in Nigeria? Does profit, retained earnings, past dividend and growth matter in dividend policy?

The overall aim of the study is thus to identify the determinants of dividend policy of manufacturing firms in Nigeria.

## 2. Study background

The contribution of manufacturing sector to Gross Domestic Product (GDP) in Nigeria has been volatile over time. Manufacturing accounted for about 10% of GDP before the oil boom of the 1970s. As a result of increase in revenue from oil exports from the 1970s, the share of manufacturing to GDP declined. By 1984, manufacturing contributed only about 5% to Nigeria´s economic output. There has been a persistent decline in oil prices since 2014, with attendant negative effects on revenue from oil exports. The contribution of manufacturing to GDP has increased to about 13% in 2020. The Government policy has focused on diversification to non-oil sectors, including manufacturing.

There are various legislations that affect manufacturing firms' performance in Nigeria, especially as it relates to dividend payouts. S.432(1)-(4) of Company and Allied Matters Acts (CAMA) 2020 (Amended) in Finance Acts 2020 S.60 on Rights of a shareholder to claim for dividend, which are unclaimed and returns of money warrants; this was not the position in CAMA 1990 as there was no clear statement on unclaimed dividend and its treatment. CAMA 1990, which prohibited companies from buying or acquiring their own shares, except to do so in limited circumstances. This has now changed with new CAMA 2020 (amended) in S.184 - S.187, which set out the law in relation to companies purchase of its own shares, (share buy-back) and Treasury shares and set out the requirements for doing so. The effects of this change is that public and private companies now have an option of repurchasing their issued shares.

Capital Gain Tax (CGT) Act 2004 exempts any gains realized by a person from disposal of shares and stocks, Nigeria Government Securities. This was later amended in the Finance Act 2019 S.26-S.30 and S.32 - S.40 of CGT (see Appendix Table 2 - withholding tax is an advance tax charge on income. It is regulated under Company Income Tax Act (CITA), the information circular published No. 2006/02 by Federal Inland Revenue, which provided that 10% is chargeable on dividend received by a Nigeria company or a non-resident company. The tax imposed is regarded as a final tax, but corporate bodies are allowed to recoup withholding tax deductions where dividend is to be redistributed as Franked investment income. However, the Petroleum Profit Tax Act exempts dividend payable by oil producing companies from withholding tax imposition.

Furthermore, the Investment and Security Act 2007 on rules and regulation on Sundry Amendment Rules 44(1) states the rules guiding dividend and returns of money warrants and unclaimed dividend with the treatment and utilization of such.

The Finance Acts 2019 S.23(1) of CITA made some amendments to tax charge on dividend payments by small companies of an exemption in the first 5 years of operations while S.40 relates to reduction of taxes payable by companies based on their turnover sizes of small, medium and large company. Other laws are Pencom Reform Acts 2014 part xii on investment of pension fund, which stated the minimum amount to be invested in stocks/shares by the Pension Fund Administrator (PFA).

There are 360 listed firms on the Nigerian Stock Exchange and more than 60% are in the manufacturing sector. Table 1 below presents a snapshot of the Nigeria Exchange as at end of 2020. At the end of 2020, the size of the market measured as market capitalization as a proportion of nominal GDP is about 13.8% and the total value of stock traded as a percentage of GDP is less than 1% (0.57%).

The Nigerian Exchange continues to serve as a source of long-term finance to manufacturing firms in Nigeria.

Table 1: Nigerian stock market snapshot as of 2021

	2007	2020*
No. of listed companies	202	360
Bonds	93	139
Size: Equity Market Capitalization in % of GDP	75.29	13.8
Stock traded,total value in % of GDP	3.10	0.57

 $Source: Nigeria\ Exchange\ Limited, 2021, Adelegan, 2008, Nigeria\ Market\ Capitalization\ and\ Stock\ traded\ as\ \%\ of\ GDP, 2020\ |\ CEIC\ Data.$ 

### 3. Literature review

The earliest research on determinants of dividend policy was conducted by Lintner (1956) on American companies in the mid-1950s. The study concluded that dividend decision was based on the current profitability and, in part, on the dividends of the previous year. Since then, debate on dividend payments has been on-going, with mixed and at times conflicting results. Studies have been carried out in both emerging and developed economies. In Nigeria, earlier studies include Uzoaga and Alozienwa (1974), Soyode (1975), Inanga (1975) Oyejide (1976), Odife (1977), Izedonmi and Eriki (1996), Adelegan and Inanga (2001), Adelegan (2000; 2002; 2003; 2006; 2009), Adesola and Okwong (2009), Nwodibie (2013), Adediran and Alade (2013) (see Appendix Table 2 for highlights of literature review on dividend policies).

Brealey and Myers (2005) identified dividend policy as one of the ten top problems that are unresolved in corporate finance. In the empirical literature, one of the important finance issues investigated intensely is the factors affecting a firm's dividend policy.

In addition to profit and preceding year dividend, other determinants of dividend policy identified in the literature include earnings per share (Ahmed and Javid (2009), (Ahmed and Attiya (2009), Powers and Al-Twaijry (2007)); free cash flow and liquidity (Aivazian et al. (2003), (Amidu and Abor (2006), Li and Lie (2006), (Anil and Kapoor, 2008; Ahmed and Attiya, 2009); the ratio of retained earnings to total equity (DeAngelo et al. (2006); flexible payouts orspecial dividend and repurchases) Armitage and Gallagher (2020), institutional ownership and firm's efficiency (Abdelsalam et al. (2008); higher financial performance (Ali et al (2017), tax, Nnadi and Akpomi (2008); sales growth, debt-to-equity ratio and tax Gill et al. (2010), Size and age (Al-Malkawi (2007, Afzal and Mirza (2010), Mehta (2012), Sajid (2012), Fakhra and Sajid (2013)); government ownership (Kuwari (2009); financial leverage (Al-Malkawi, 2007), Kania and Bacon (2005)) and earnings quality (Lawal 2012). Empirical findings in support of information content of dividend policy and signalling theory include those of Pettit, 1972; and Dewenter and Warther, 1998. . while studies on dividend announcement, the share price and market efficiency include Adelegan, 2003b, 2006a and b, 2009, (Akbar and Baig, 2010), Asamoah (2010). Ali et al (2017), (Anil and Kapoor, 2008; Ahmed and Attiya, 2009).

Scholars have analysed determinants of corporate dividend policy in Nigeria since early 1970s, and they have arrived at mixed results. **Uzoaga & Alozienwa (1974)** 

blazed the trail of the study of dividend policy of Nigerian firms during indegenisation using data from 13 companies and 52 firm-year observations from 1969 to 1973. They claimed that they found very little evidence to support the classical influence that determine dividend policy in Nigeria during these period and concluded that 'fear and resentment' seem to have taken over from the classical forces. Soyode (1975) and Inanga (1975 & 1978) challenged the 'fear and resentment' theory put forward by Uzoaga and Alozienwa. Soyode (1975) found that constant cash needs and simultaneous cash inflows from Nigerianised shares are responsible for the reduction in retained earnings and higher dividends during indegenization decree, while Inanga(1975 & 1978) Identified under-pricing of the new issues of companies affected by the indegenisation decree as contributory factor to the upward change in rate and level of dividend distribution.

Oyejide (1976) empirically applied the Lintner's model modified by Brittain on 19 quoted companies from 1969 to 1976. He disagreed with previous studies and concluded that the available evidence provides a strong and unequivocal support for the conventional determinants in explaining dividend behaviour of Nigerian listed firms. However, Odife (1977) adjusted for stock dividend and concluded that the real rate of dividend payments were actually higher. The study agreed with Uzoaga and Alozienwa that high earnings payment ratio on the wake of indenisation policy introduced an element of uncertainty which motivated foreign investors to seek to realise a good proportion of their investment and reduce risk through higher dividend.

The inconclusive controversy seems to have come to a temporary halt in the late 1970s until 1996 when Izedonmi and Eriki studied the payout ratio, dividend per share and earnings per share of 13 Nigerian quoted companies and concluded that that Nigerian firms are interested in maintaining the level of dividend and they hardly reduce dividend even in the face of declining earnings per share (EPS). Adelegan, 2000a & b & 2003a studied the determinants of dividend policy using 63 listed firms in Nigeria (882 firm years) from 1984 to 1997. The studies found that the relationship between dividend changes and cashflows depend on the level of growth, capital structure choice, size and economic policy changes.

Adelegan and Inanga (2001) carried out a contextual analysis of the determinants of dividend patterns of commercial banks in Nigeria using 20 banks quoted on the Nigerian stock market for 177 firm-year study between 1984 and 1999. The study finds that bank growth potentials and bank size affect the association between changes in dividend and cash flow of corporate banking firms in Nigeria. The study also found that cash flow rather than accounting after tax earnings determine the dividend payout of banks in Nigeria.

Adelegan 2002a & b & 2007 examined the interactions of dividend payout with financial leverage and investment and also tested the pecking order hypothesis on dividend payout using data from Nigerian listed firms from 1984-1998. The results show that financial leverage has a positive effect on dividend payout while investment has a negative influence (Adelegan, 2007). Retained earnings is high and

constitute a major source of financing (Adelegan 2002a) and findings partly supports the validity of the pecking order hypothesis in explaining dividend payments of firm (Adelegan (2002b).

Adelegan (2003b, 2006a and b, 2009) analyzed stock market reactions to dividend initiation and omissions, increase, decrease and no-change positions in Nigeria using daily stock prices from 1990 -1999 and around 742 dividend announcement dates. Findings show that dividend policy matters, and that share prices do react to dividend announcement, initiation, and omissions differently. Reactions to omissions are more pronounced than to payments of a dividend. Reactions to dividend payments and omissions are not symmetrical, as omissions tend to be more serious events than payments.

Adesola and Okwong(2009) analysed the dividend behaviour of 27 Nigerian quoted companies from 1996-2006 and found that market share price is a representation of market valuation of dividends. Nwodibie (2013) analysed dividend behaviour of Nigerian firms and finds that complaints of shareholders are not a determinant of current and future dividend decisions, while there exists an inverse relationship between the needs and desires of shareholders and the naira dividend paid by firms in Nigeria. Adediran and Alade (2013) studied dividend policy using 25 quoted companies in Nigeria. They find that there is a significant positive relationship between dividend policies of organizations and profitability, investments, and earnings per share.

Adelegan et al 2015, examine the determinants of dividend policy of non-manufacturing firms in Nigeria using 230 firm year data from 2005 to 2013. The study conclude that profit after tax and total distributable earnings are key determinants of firm dividend payment in Nigeria. Olawale,B and Ilo,L (2018) examined the effects of dividend policy on stock prices of listed firms in Nigeria using panel data from 2010 to 2014. They find that dividend payout ratio has a positive non-significant effect on stock prices.

This present study improve on previous studies on determinants of dividend policy of firms in Nigeria using a more comprehensive and recent data set of 153 listed firms with 1,101 firm-years observations from 1984 to 2020. The study also focus on the manufacturing sector which is the engine of growth contributing 13% to GDP in 2020 and pivotal to the Government policy on diversification to non-oil sectors.

#### Review of legislation on manufacturing firms in Nigeria

There are various legislations, rules and regulations that affect manufacturing firms' performance in Nigeria especially as it relates to dividend payouts. S.432(1)-(4) of CAMA 2020 (Amended) in Finance Acts 2020 S.60 on rights of a shareholder to claim for dividend, which are unclaimed and returns of money warrants; this was not the position in CAMA 1990 as there was no clear statement on unclaimed dividend and its treatment. CAMA 1990, which prohibited companies from buying or acquiring their own shares, except to do so in limited circumstances, has now changed with

new CAMA 2020 (amended) in S.184 - S.187, which sets out the Law in relation to companies' purchase of its own shares (share buy-back) and Treasury shares and sets out the requirements for doing so. The effects of this change are that public and private companies now have an option of repurchasing their issued shares. Payouts through share buy-backs or repurchase is yet to be widely adopted in Nigeria, as prior to the Finance Act 2020, share buy-back was not allowed for any company, but with the advents of the Acts, more firms tend to opt for this with strict compliance to the requirements of the Acts.

Capital Gain Tax Act 2004 exempts any gains realized by a person from disposal of shares and stocks; Nigeria Government Securities; this was later amended in the Finance Acts 2019 S.26-S.30 and S.32 - S.40 of CGT.

Withholding tax is an advance tax charge on income. It is regulated under CITA, the information circular published No: 2006/02 by Federal inland revenue and which provided that 10% is chargeable on dividend received by a Nigeria company or a non-resident company. The tax imposed is regarded as a final tax, but corporate bodies are allowed to recoup withholding tax deductions where dividend is to be redistributed as Franked investment income. However, the Petroleum Profit Tax Act exempts dividend payable by oil-producing companies from withholding tax imposition.

Furthermore, the Investment and Security Act 2007 on rules and regulation on Sundry Amendment Rules 44(1) states the rules guiding dividend and returns of money warrants and unclaimed dividend with the treatment and utilization of such.

The Finance Acts 2019 S.23(1) of CITA made some amendments to tax charge on dividend payments by small companies of an exemption in the first 5 years of operations while S.40 relates to reduction of taxes payable by companies based on their turnover sizes of small, medium and large company. Other laws include the Pencom Reform Acts 2014 part xii on investment of pension fund. The maximum amount of pension fund assets that can be invested by the Pension Fund Administrators (PFA) in ordinary shares is 10%. Pension funds can facilitate the growth of the Nigerian stock market. However, Pension fund Adminstrators can only invest in shares of companies that have paid a dividend in a minimum of one year of the last five years. The magnitude of Pension Fund assets in stock maket can make them blockholders with likely impact on dividend policy of corporate firms where the pension funds are invested. Pension funds as blockholders are not likely to have a strong incentive to control management, as they have diversified portfolios and are not dependent on investments in a specific company. They may take an active role through monitoring and advisory roles through representation on the board to mitigate agency costs which stated the minimum amount to be invested in stocks/shares by the Pension Fund Administrator (PFA).

# 4. Theoretical framework and methodology

#### Theoretical framework

The study adopted the Lintner 1956 partially adjusted model, as modified by Brittain (1964), Charitous and Vafeas (1998) and Adelegan (2000a. According to the model, firms' dividends () are related to firms' earnings or profit after tax () and firms try to maintain dividend at previous levels. As a result, firms tend to retain part of their annual earnings as revenue reserve, which can be used to pay cash dividend or bonus shares (stock dividend) in the future, while ensuring that the previous dividend level is maintained.

$$DIV_{it} = rPAT_{it}$$
 (1)

Where: r is the target payout ratio of dividend to profits.

The year-to-year dividend changes are explained by a partial adjustment form:

$$\Delta DIV_{it} = ait + cit (DIV_{it} - DIV_{it-1})$$
(2)

Where ( $\Delta DIV_{it} = DIV_{it} - DIV_{it-1}$ ), which is change in dividend payments, **ait** is the constant term. **cit** is the speed of adjustment factor, normally assumed to lie between zero and unity.

From equations 1 and 2, Lintner derived the dividend model:

$$\Delta DIV_{it} = ai + ci[riPAT_{it} - DIV_{it-1}]$$
(3)

Equation 3 implies that current dividend is a function of current earnings and immediate past dividend payments.

Other authors, as indicated above, have introduced new explanatory variables into the Lintner model. These include liquidity, sales fluctuation, indebtedness, retained earnings and total distributable earnings and growth.

#### **Empirical analysis**

#### Data sources and variable definition

Our dataset is an unbalanced panel of all Nigerian listed manufacturing firms over the period 1984 to 2020. We excluded banks, investment firms, insurance and other service sectors. Financial data from 1984-2020 was hand collected from the annual reports of listed manufacturing firms and Nigerian stock exchange factbooks and data on market prices and dividend were obtained from the research department of the Nigerian Stock exchange. Our data covers 1,013 firm-years of 150 firms. The Nigerian Stock Exchange is a reliable source of data of quoted companies because the companies are mandatorily required to submit their financial reports to the Nigerian Stock Exchange quarterly and bi-annually. Company annual reports are also reliable because they are statutorily required to be audited by recognized auditing firms before publication.

#### Model specifications

The variables specified in the regression model are dividend (DIV), profit after tax (PAT), total distributable earnings (TDE), leverage (LEV), sales growth, total assets (Ln(Firm size), market-to-book-value (MBV) and control variables including industry (I) and year (Y) controls. These variables are described below.

The general form of the regression is:

$$DIV_{it} = a + b1PAT_{it.} + b2DIV_{it-1.} + b3TDE_{it.} + b4LEV_{it.} +$$

$$b5In(Size) + b6Salesgr + b7MBV_{it.} +$$

$$b8(I_{it}) + b9(Y_{it}) + \varepsilon_{it}$$

$$(4)$$

Where: dependent variable is current year dividend, DIV is the share of dividend in total earnings, PAT is logarithm of earning or profit after tax,  $DIV_{t-1}$  is the dividend with a lag, TDE is total distributable earnings, which is measured as logarithm of current year profit plus retained earnings. Retained earnings is the profit or unappropriated earnings that was not distributed as dividend to shareholder, LEV

is leverage, a measure of indebtedness defined as total book value of debt divided by book value of common shareholders equity; salesgr is sales growth measured as annual percentage change in sales and *MBV* is market to book value, a measure of market valuation of a firm's assets and also a proxy for growth defined as market value of common equity, plus book value of total assets minus book value of common equity divided by book value of total assets.

Industry controls includes industry dummies, and Year controls (Y) are the dummy variables that capture year fixed effects. We winzorised values of each variable to adjust for outliers without losing any observation by carefully analyzing the extreme values to avoid their influence on our key results. In addition, industry (sector classification at one digit level) and year dummies are all included in our empirical analysis.

We consider the role of uncertainty and the fact that shareholders may not have perfect information on the financial performance of firm, coupled with the fact that previous empirical studies of market efficiency around stock splits, and earnings and dividend announcements in Nigeria have found that the Nigerian capital market is not semi-strong efficient (Olowe, 1998, Oludoyi, 1999 & Adelegan 2009). As a result of imperfect information, the study analyzed the data on dividend, profit and sales growth at current levels and also at lagged levels.

### **Descriptive statistics**

Table 2 shows that manufacturing firms are more represented in industrial sector (about 33%), consumer goods (21%), conglomerates (12%), health care (about 10%) and automobile and tyre and textile (about 6%).

Table 2. Number of observations of firm-years for each industry 1984-2020

	<i>j</i>		
	All firms	Percentage	
Agriculture/processing	41	3.72	
Automobile and tyre	62	5.63	
Conglomerates	124	11.26	
Consumer goods	208	18.89	
Healthcare	105	9.54	
ICTand office equipment	54	4.90	
Industrial goods	423	38.42	
Publishing	23	2.09	
Textiles	61	5.54	
	1,101	100.00	

Table 3 panel A presents the overall descriptive statistics for the variables used in the regression analysis. Average DIV as a share of earnings is 46.0%, while average PAT is 9.74% and MBV of manufacturing firms on the average is 3.46%. The mean average of the Total Distributable Earnings (TDE) is high. This implies that many firms keep part

of their earnings as retained earnings and in revenue reserve. The retained earnings can be used to pay dividend in the future and when profit is dwindling; a firm can use retained earnings to maintain the dividend level. Firms with growth and satisficing objective can also use retained earnings to grow the business into the future. Retained earnings is internal fund, which has been ranked in empirical literature at the top of the pecking order followed by debt and hybrids of debt-equity, with external finance at the bottom of the pecking order. In theory, firms prefer to use internal equity such as retained earnings to pay dividend and finance new investment because of the illusion of costlessness associated with internal funds. The debt-equity ratio (LEV), which is a measure of leverage, is about 2:1; this shows that some firms borrow to finance their business, and manufacturing firms, on average, are highly geared. This confirms that two major sources of finance for manufacturing firms in Nigeria are borrowed funds and company's retained earnings.

The standard deviation of dividend per share is 0.26, which is quite low. The standard deviation of sales growth and leverage are higher than the other variables, signifying that they are noisier measures.

Table 3: Descriptive statistics of Nigerian manufacturing firms, 1984-2020

Panel A

	Mean	SD	Min	p50	Max
DIV	0.46	0.26	0	0.48	1
PAT	9.74	2.11	2.93	9.43	15.49
LEV	2.01	4.75	0.004	0.15	20.55
TDE	10.20	2.12	3.63	9.88	17.25
RET	8.94	2.01	5.624	8.74	12.74
Ln(Size)	11.65	1.51	9.39	11.45	15.94
Profit Margin	0.39	0.05	0.01	0.4	0.40
Sales Gr	50.94	113.63	-9.59	26.56	67.07
MBV	3.46	2.39	0.06	2.76	15.15

Panel B

	DIV	PAT	TDE	LEV
Agriculture	0.41	9.09	9.55	1.49
Auto and tyre	0.36	8.83	9.39	1.00
Conglomerate	0.48	11.05	11.43	2.19
Consumer goods	0.91	10.46	10.88	1.21
Health care	0.30	9.06	9.50	0.50
ICT	0.44	8.82	9.12	1.44
Industrial goods	0.36	9.23	9.65	0.99
Publishing and printing	0.31	8.62	8.94	0.22
Textile	0.33	10.21	10.71	3.03

Panel B presents variables that describe the average values of the variables according to industry classifications. In general, manufacturing firms pay dividend, and they are highly geared. On average, firms in consumer goods sector pay more dividend (about 91 kobo), followed distantly by conglomerates that paid dividend of about 48 kobo per share on average. Textiles and conglomerate industries are highly geared. Conglomerates, consumer goods and textiles have higher profit and total distributable earnings.

Table 4 presents the correlation coefficients of the variables for the 1,013 firm-year study of determinants of dividend policy of firms.

Table 4: Correlation coefficients of variables

PAT	DIV	LEV	TDE	MBV	DIV_t-1	
PAT	1.0000					
DIV	0.6239	1.0000				
LEV	0.1454	0.1671	1.0000			
TDE	0.9841	0.6021	0.1768	1.0000		
MBV	0.0985	0.2251	-0.2324	0.0707	1.0000	
DIV_t-1	0.6328	0.8810	0.1615	0.6108	0.2975	1.0000

Source: Authors' computation using Stata

The correlation between dividend per share and total distributable earnings is positive, while the correlation between the lagged dividend and PAT is negative. The correlations of the variables are generally low. However, these correlation coefficients primarily have descriptive values, and conclusions about determinants of dividend behaviour of firms are dependent on the multivariate tests.

## 5. Multivariate evidence

In this section, we test our model to identify the determinants of dividend policy.

The empirical results of the determinants of dividend behaviour of corporate manufacturing firms are presented in Table 5. The regression results are presented in model 1 to 4.

Table 5: Regression results of determinants of dividend policy of manufacturing firms

	(1)	(2)	(3)	(4)
	DIV	DIV	DIV	DIV
Test variables				
PAT	0.113***	0.109***		
	(9.73)	(8.92)		
DIV_L1	0.419***	0.416***	0.458***	0.443***
	(16.33)	(16.30)	(15.93)	(14.93)
Ln(TDE)	-0.125***	-0.122***		
	(-11.84)	(-11.59)		
LEV		-0.001		
		(-0.95)		
Ln(Size)		0.013**		
		(2.25)		
Salesgr		-0.000***		
		(-6.05)		
MBV		0.004		
		(1.29)		
PAT_L1			0.051***	0.053***
			(4.06)	(3.92)
TDE_L1			-0.062***	-0.065***
			(-5.41)	(-5.47)
LEV_L1				0.000
				(0.27)
Ln(Size)_L1				0.002
				(0.31)

**Table 5 Continued** 

Test variables	(1)	(2)	(3)	(4)
	DIV	DIV	DIV	DIV
Salesg_L1				0.000
				(0.08)
MBV_L1				0.003
				(1.03)
Constant	0.468***	0.346***	0.405***	0.381***
	(7.39)	(4.38)	(6.02)	(3.04)
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Observations	1101	1101	1092	1076
Adjusted R <sup>2</sup>	0.403	0.426	0.336	0.328

t statistics in parentheses

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Model 1 presents the parameter estimates of the regression of dividend on past year dividend, profit after tax and total distributable earnings. The coefficient of profit after tax and dividend of preceding year are positive and statistically significant. This implies that dividend behaviour of firms is determined by the profit and past year dividend. This result affirms the importance of earnings and preceding year dividend in the determination of dividend payout. The Adjusted R2 is about 40%. The coefficient of TDE is negative and statistically significant. This supports the view that manufacturing firms in Nigeria retain profit to finance growth and for payment of future dividend.

Model 2 presents the parameter estimates of the regression of dividend on past year dividend, profit after tax, total distributable earnings, leverage, sales growth and market to book value. The coefficients of profit after tax and preceding year dividend are also positive and statistically significant, while the coefficients of total distributable earnings and sales growth are negative and statistically significant. The coefficient of firm size measured by total assets is positive and statistically significant. This implies that bigger manufacturing firms pay dividend more than smaller firms. This is partly because they are more stable, with more cashflows and have easier access to raise funds from both the banking sector and the capital market to finance expansion. The coefficient of market book value (MBV) is positive but not statistically significant, while the coefficient of leverage is negative but statistically insignificant. This implies that current year earnings and preceding year dividend influence the dividend payments of listed manufacturing firms in Nigeria. This is consistent with findings in Lintner (1956), Oyejide (1976), and Charitous and Vafeas (1998). The coefficients of leverage and market book value are not statistically significant. The coefficient of leverage is negative but not statistically significant. High leverage is expected to affect the dividend payment of firms, as

this will reduce the dividend as the debt interest has to be paid from earnings and profit after tax before dividend payment is considered. A high level of leverage will result in stockholders/bondholders' agency problems that arise when debt is risky and predicts a negative relationship between leverage and profitability (Fama and Miller, 1972; Jensen and Meckling, 1976). However, the non-significance of the coefficient implies that it is not a major determinant of dividend payment by corporate firms in Nigeria.

Model 3 considers the role of uncertainty and the fact that shareholders do not have perfect information. The model was estimated with dividend as the dependent variable and lagged values of profit, dividend and total distributable earnings are independent variables. The coefficients of lagged dividend and profit are positive and statistically significant, while the coefficient of lagged total distributable earnings is negative and statistically significant.

Model 4 was also estimated with lagged values for the independent variables. Model 4 presents the parameter estimates of the regression of dividend on past year dividend, lagged values of profit after total tax distributable earnings, leverage, sales growth, firm size and market book value. The coefficients of preceding year dividend are positive and statistically significant, and the parameter estimate of profit after tax is also positive and significant. The coefficient of total distributable earnings growth is negative and statistically significant. This implies that preceding year dividend influences the dividend payments of listed manufacturing firms in Nigeria, and firms are unwilling to pay lesser dividend than the previous years because of the impact on their market value. The coefficients of leverage and market to book value and sales growth are not statistically significant.

We estimated all the models with industry and year dummies. In 2015, the Nigerian government partially privatized and unbundled the power sector to establish a competitive market to improve management and efficiency in generation and distribution of electricity. Expenditure on electricity constitutes about 40% of the cost of doing business by manufacturing firms in Nigeria (MAN, 2020). The partial privatization of the power sector is expected to boost the performance of manufacturing firms. We introduced year dummy for 2015 to measure the impact of the policy. The year dummy for 2015 was positive but not statistically significant. The coefficient of growth, measured by market to book value, is positive but not statistically significant. Low growth is expected to have a negative impact on the dividend payment of firms. The regression results show that profit after tax and preceding year dividend and total distributable earnings are the major determinants of dividend policy of listed manufacturing firms in Nigeria. The results are consistent with previous findings in Nigeria by Oyejide (1976), Odife (1977), Izedonmi and Eriki (1996), Adelegan and Inanga (2001), Adelegan (2000a and 2000b; 2002a and 2003a) and Adediran and Alade (2013).

There is an overlap between profit after tax, total distributable earnings and retained earnings, and they are expected to be highly correlated. We ran some diagnostic tests for multicollinearity. We used the variance inflation factor (VIF) to measure the correlation and the strength of correlation between profit after tax, retained earnings and total distributable earnings. We tested for multicollinearity of total distributable earnings (TDE), profit after tax (PAT), retained earnings (RET) and dividend with a lag (DIV\_L1) using Variance Inflation Factor (VIF) and the result is presented in Table 6 Panel A below.

**Table 6 Variance Inflation Factor (VIF)** 

#### **Panel**

AVariable	VIF	1/VIF
TDE	67.16	0.015
PAT	42.42	0.024
RET	10.67	0.094
DIV_L1	1.06	0.943
Mean VIF	30.33	

#### Panel B

Variable	VIF	1/VIF
PAT	6.78	0.15
RET	5.87	0.17
TDE_L1	3.07	0.33
DIV_L1	1.10	0.91
Mean VIF	4.20	

From Panel A, the VIF values for profitt after tax, total distributable earnings and retained earnings are greater than 5, which indicates potentially severe correlation between profit after tax, total distributable earnings and retained earnings.

In Panel B, we used lag value of total distributable earnings and checked for multicollinearity and the VIF value for lag total distributable earnings (TDE) reduced to 3. We included total distributable earnings in our model estimation at lag. The VIF values for profit after tax (PAT) and retained earnings (RET) is higher than 5. As there is severe multicollinearity between profit after tax and retained earnings, we removed retained earnings from the model estimation.

We consider the issue of endogeneity and re-estimated equation 4 with lag values of total distributable earnings at level 2. The results are presented in Table 7.

In model 1, profit after tax and lagged dividend are positive and statistically significant. This further shows that both profit after tax and past dividend level explain the dividend payout of manufacturing firms.

Table 7: Regression results of the determinants of dividend policy of manufacturing firms

New Roman	(1)	(2)	(3)	(4)
	DIV	DIV	DIV	DIV
Test variables				
PAT	0.013**	0.000		
	(2.33)	(0.03)		
DIV_L1	0.508***	0.461***	0.510***	0.488***
	(18.57)	(16.98)	(18.39)	(16.53)
TDE_L1	-0.007	-0.027***		
	(-1.34)	(-4.62)		
	(-0.74)	(-1.78)	(0.10)	(0.82)
LEV		-0.003**		
		(-2.04)		
Ln (Size)		0.022***		
		(3.65)		
Salesgr		-0.000***		
		(-7.05)		
MBV		0.006*		
		(1.88)		
PAT_L1			0.001	0.002
			(0.18)	(0.28)
TDE_L2			-0.018***	-0.020***
			(-3.72)	(-3.67)
LEV_L1				0.000
				(0.13)
Ln(Size)_L1				0.005
				(0.78)
Salesgr_L1				-0.000
				(-1.08)
MBV_L1				0.003
				(1.00)
y2015	0.146	0.085	0.118	0.109
	(0.61)	(0.37)	(0.50)	(0.46)
Constant	0.424***	0.283***	0.345***	0.211
	(6.22)	(3.40)	(2.75)	(1.48)
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Observations	1092	1092	1038	1025
Adjusted R <sup>2</sup>	0.329	0.373	0.334	0.327

t statistics in parentheses

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

In model 2, size continues to be positive and statistically significant, while sales growth is negative and statistically significant. This implies that bigger manufacturing firms pay dividend, while growing firms pay less dividend because they want to retain more earnings to finance growth and expansion.

In model 3 and 4, the coefficients of lagged dividends are positive and statistically significant. The year dummy for 2015 is positive in all the models, but statistically insignificant.

To eliminate multicollinearity, we removed total distributable earnings and reestimated equation 4 and presented the results in Table 8.

Table 8: Estimates of the determinants of dividend policy (excluding total distributable earnings)

	(1)	(2)	(3)	(4)
	DIV	DIV	DIV	DIV
Test variables				
PAT	0.020***	0.025***		
	(5.90)	(6.28)		
DIV_L1	0.519***	0.502***	0.523***	0.510***
	(20.15)	(19.41)	(19.99)	(18.74)
LEV		-0.003*		
		(-1.80)		
Ln(Size)		0.022***		
		(3.66)		
Salesgr		-0.000***		
		(-5.16)		
MBV		0.008**		
		(2.48)		
PAT_L1			0.015***	0.018***
			(4.57)	(4.28)
LEV_L1				-0.000
				(-0.05)
Ln(Size)_L1				0.005
				(0.86)
Salesgr_L1				0.000
				(1.00)
MBV_L1				0.004
				(1.19)
y2015	0.143	0.093	0.132	0.130
	(0.59)	(0.39)	(0.54)	(0.53)

**Table 8 Continued** 

	(1)	(2)	(3)	(4)
	DIV	DIV	DIV	DIV
Test variables				
y2020	-0.029	-0.014	-0.033	-0.034
	(-0.53)	(-0.27)	(-0.60)	(-0.62)
Constant	0.405***	0.214**	0.362***	0.426***
	(6.03)	(2.58)	(5.35)	(3.57)
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Observations	1101	1101	1101	1085
Adjusted R <sup>2</sup>	0.324	0.353	0.316	0.306

t statistics in parentheses

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

In models 1 to 4, the coefficients of lagged dividend and profit are positive and statistically significant. In model 2, the coefficients of size and market valuation measured as market to book value are positive and significant. Sales growth and leverage have negative and statistically significant coefficients, which implies that the higher the level of debt, the lower the level of dividend payout. Also, growth opportunities will also lead to reduction in dividend payment.

The year dummy for 2015 is positive but insignificant. The year dummy for 2020 was also introduced to analyse the impact of the recession that accompanied COVID-19 on the manufacturing sector in Nigeria. The coefficient of the year dummy 2020 is negative but not significant.

For robustness, we re-estimated our model with two-stage least square (2SLS) with instrumental variables and the results are presented in Table 9.

Table 9: 2SLS estimates of the determinants of dividend policy

	(1)	(2)	(3)
	DIV	DIV	DIV
Test variables			
PAT	0.009***	0.011**	
	(2.97)	(2.19)	
DIV_L1	0.599***	0.823***	0.737***
	(7.02)	(10.17)	(3.54)
y2015		0,066	
		(0.26)	
		(0.39)	

**Table 9 Continued** 

	(1)	(2)	(3)
	DIV	DIV	DIV
Test variables			
LEV		-2.15	
		(-0.63)	
Ln(Size)		0.009	
		(1.35)	
Salesgr		-0.0003***	
		(5.79)	
MBV		0.028	
		(0.85)	
PAT_L1			0.023***
			(4.57)
LEV_L1			0.0008
			(0.04)
Ln (Size)_L1			0.024**
			(2.39)
Salesgr_L1			-0.036***
			(-5.50)
MBV_L1			0.005
			(1.46)
Instruments	TDE_L1	TDE_L1	TDE_L2
Observations	1187	1095	650
$R^2$	0.3452	0.2696	0.3036

t statistics in parentheses

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

In model 1, the coefficient of profit after tax and dividend lag are positive and statistically significant. This shows that past dividend and profits continue to explain dividend payout of manufacturing firms.

In model 2, sales growth also has negative but statistically significant coefficients. The year dummy for 2015 is positive but insignificant. The coefficient of leverage is negative and significant.

We estimated model 3 with lagged values. The coefficients of lagged values of dividend, profit and size are positive and statistically significant. The coefficients of sales growth are negative and significant, while the coefficient of size is positive and significant.

# 6. Summary, conclusion and policy recommendations

The study examined the determinants of dividend policies of manufacturing firms quoted in the Nigerian Stock Exchange. The data for the study were obtained through secondary sources from the annual reports of the selected firms from 1984-2020. Data on present and past dividend, profit, total distributable earnings, leverage, sales growth, firm size and market to book value of listed manufacturing firms were analyzed.

The study finds that profit after tax, preceding year dividend, firm size and growth are the major determinants of dividends policies of manufacturing firms in Nigeria. The study concludes that, if manufacturing firms in Nigeria are to be able to pay and sustain dividends, they must constantly seek to enhance their performance to generate optimum earnings.

In view of the findings of this study, the following recommendations are made:

- There is need for manufacturing firms to improve on their performance and increase their profitability level to have enough to transfer to general reserves for dividend payment, especially when there is recession in the economy, as dividend payment is a key factor in growing investors' confidence and in enhancing the market value of firms.
- The Board of Management in their oversight function should direct manufacturing
  firms towards the dividend payout policy that will maximize the objectives of their
  firms, whether it is short- or long-term growth, profit maximization or satisficing.
  This will guide prospective investors or shareholders to take informed decisions
  in the choice of their portfolio of financial assets that satisfy their risk appetite
  and short- and long-term financial expectations.
- The Board and management of manufacturing firms should ensure that adequate
  policies are formulated for the growth of firms and to maximize shareholders
  wealth. Policy and strategies should aim at increasing management efficiency
  and effectiveness by reducing operating cost, as this will enhance profitability
  and dividend policy.
- Proper legislations should be put in place to protect minority shareholders to mitigate principal-principal problems that can arise as a result of ownership concentration of Pension fund Administrators and other blockholders.

- Manufacturing firms should formulate policies and device strategies to increase
  profit level, with the aim to increase profit and dividend payment. Corporate
  dividend policy should accommodate the interest of blockholders such as Pension
  Funds that are required to only invest in shares of companies that have paid a
  dividend in a minimum of one year of the last five years.
- The Government could provide an enabling environment for manufacturing firms to operate at maximum capacity. This will encourage firms to pursue growth enhancing objectives, increase productivity and contribute more to GDP.

Furthermore, theoretical and empirical literature have pointed at profit and past dividends as key determinants of dividend policy. A pertinent question is what determines profitability? Profitability will partly depend on a firms' capabilities and investment. Future research can focus on finding the determinants of profitability and firm performance.

## **Notes**

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# **Appendix**

Table 1: Tax and dividend pattern of manufacturing firms in Nigeria, 1984-2000

			1	
Year	Personal income tax rate (%)	Capital gains tax (%)	Payout ratio (% of PAT)	Payout ratio (% of TDE)
1984	10-70	20	43.25	15.04
1985	10-70	20	43.13	17.34
1986	10-70	20	47.28	15.16
1987	10-55	20	40.21	15.01
1988	10-55	20	49.82	18.30
1989	10-55	20	41.89	18.06
1990	10-55	20	44.49	13.95
1991	10-55	20	41.38	16.04
1992	10-55	20	45.23	14.42
1993	10-55	20	46.93	14.98
1994	10-55	20	49.48	16.21
1995	10-55	20	36.98	13.51
1996	10-55	10	69.32	14.31
1997	10-55	10	38.85	14.14
1998	10-55	0		
1999-2001	5-25	0		
2002-2010	5-25	0		
2011-2020	7-24	0		
Average 1984-2020			46.00	11.14

Source: Ariyo (1997), Ikokwu (2002), Adelegan (2007; Federal Office of Statistics, (2020), Federal Inland Revenue Services (2021) and authors' computations

Table 2: Highlights of literature review Evidence from Nigeria

Level of efficiency/ author	Data/country	Results/findings
Uzoaga & Alozienwa (1974)	Study the pattern of dividend policy of 13 Nigerian firms during indegenisation from 1969 to 1973.	Found minimal evidence to support the classical influences that determine dividend policies in Nigeria. Study found that Dividend policy were raised by firms in the wake of indegenization because of 'fear and resentment.
Soyode 1975	Challenged the 'fear and resentment' theory put forward by Uzoaga and Alozienwa. Study carried out during the indigenization period in Nigeria	study found that constant cash needs and simultaneous cash inflows from Nigerianised shares are responsible for the reduction in retained earnings and higher dividends during indegenization decree
Inanga (1975)	Analysed determinants of dividend policy using data from 27 Nigerian firms from 1969-1973	Identified under-pricing of the new issues of companies affected by the indegenisation decree as contributory factor to the upward change in rate and level of dividend distribution.
Oyejide (1976)	Applied Lintner model to examine dividend policy of 19 quoted firms in Nigeria from 1969-1976.	Findings shows that there is substantial support in Nigeria for Lintner's model.
Odife (1977)	analysed determinants of dividend policy in Nigeria adjusting for stock dividend	Findings agreed with Uzoaga and Alozienwa that high earnings payment ratio on the wake of indenisation policy introduced an element of uncertainty which motivated foreign investors to seek to realise a good proportion of their investment and reduce risk through higher dividend.
Izedonmi and Eriki (1996)	studied determinants of dividend policy in Nigeria using data from 13 firms 1984 to 1989	Found that Nigerian firms are interested in maintaining the level of dividend and they hardly reduce dividend even in the face of declining earnings per share (EPS).
Adelegan, 2000a & b & 2003a	determinants of dividend policy using 63 listed firms in Nigeria (882 firm years) from 1984 to 1997.	Relationship between dividend changes and cashflows depend on the level of growth, capital structure choice, size and economic policy changes.

**Table 2 Continued** 

Level of efficiency/ author	Data/country	Results/findings
Adelegan and Inanga (2001)	contextual analysis of dividend pattern of 20 banks listed in Nigeria from 1984-1999.	Cash flow rather than accounting after tax earnings determine the dividend payout of banks in Nigeria. Bank growth potentials and bank size affects the association between changes in dividend and cash flow in Nigeria
Adelegan 2002a & b & 2007	examined the interactions of dividend payout with financial leverage and investment using data from 63 Nigerian listed firms from 1984-1998.	Financial leverage has a positive effect on dividend payout while investment has a negative influence. Retained earnings is high and constitute a major source of financing. The results partly supports the validity of the pecking order hypothesis in explaining dividend payments of firms.
Adelegan (2003b; 2006a &b,2009)	Analyzed stock market reactions to dividend policy in Nigeria using daily stock prices from 1990 -1999 and around 742 dividend announcement dates Stdy was carried out around 5 event windows on initiation, omission, increase, reduction and no change in dividend payout.	Share prices react to dividend announcements. Reactions to omissions are more pronounced than to payments of a dividend. Reactions to dividend payments and omissions are not symmetrical, as omissions  • tend to be more serious events than payments.
Adediran and Alade (2013)	Studied 25 quoted companies in Nigeria	There is a significant positive relationship between dividend policies of organizations and profitability, investments and earnings per share
Adesola and Okwong. (2009)	Dividend behaviour of 27 Nigerian quoted companies, 1996-2006	<ul> <li>Market share price is a representation of market valuation of dividends</li> </ul>
Nwodibie (2013)	Studied 25 quoted companies in Nigeria	There is a significant positive relationship between dividend policies of organizations and profitability, investments and earnings per share
Olawale and Ilo,B.M (2018)	Effect of dividend policy on market value of common stock on 24 listed firms on Nigeria stock exchange (2010- 2014)	Payout ratio has a positive effect on stock price

**Table 2 Continued** 

#### International evidences

Level of efficiency/ author	Data/country	Results/findings
Lintner (1956)	Study on America companies in the mid - 1950's	Dividend on the profitability and in part on the dividend of the previous year.
Armitage,and Gallagher (2020)	Study on payout by UK listed firms on share repurchases from 1993-2018.	Payouts is more responsive to earnings
Lawal. (2012)	examine the relation between earnings quality and bank dividends in 34 countries	the dividend-earnings relation is stronger for banks operating in countries with high earnings quality than for  • banks operating in countries with low earnings quality
Akbar and Baig (2010)	Study factors affecting dividend policy using 79 firms listed on Karachi Stock Exchange, Pakistan data from 2004 to 2007.	Dividend announcements affects the share price and market efficiency
Ahmed and Attiya (2009)	Study on factors affecting dividend policy using 320 non-financial firm listed Karachi Stock Exchange, Pakistan from 2001 to 2006	Dividend policy is affected by earnings per share (EPS) and previous dividend
Powers and Al- Twaijry (2007)	Study on factors affecting dividend policy on 300 firms Kuala Lumpur Stock Exchange, Malaysia	Current dividends are affected by the past and future earnings,
DeAngelo et al. (2006)	study on the optimal payout policy	Propensity to pay dividend is positively related to the ratio of retained earnings to total equity
Aivazian et al. (2003)	Examine firm dividend policy and stock market liquidity of NYSE and AMEX firms from 1963-2003	They found that the owners of less (more) liquid common stock were more (less) likely to receive cash dividends
Gill et al. (2010)	Analyzed the Sample of 88 American manufacturing firms listed on New York Exchange from 2005 - 2007.	Findings shows that a significant relationship between the cash conversion cycle and profitabilitymeasured through gross operating profit
Kuwari (2009)	Examined the determinants of the dividend policy of non-financial firm listed on Gulf Cooperation Council (GCC) countries stock exchanges	<ul> <li>Firms paid dividend with the intention of reducing the agency problem,</li> <li>Dividend payments were strongly related to government ownership, firm size and firm profitability, but were negatively related to leverage ratio</li> </ul>

#### **Table 2 Continued**

#### **International evidences**

Level of efficiency/author	Data/country	Results/findings
Mehta (2012)	analysis of determinants of dividend policy using evidence from United Arab Emirate (UAE) companies	Profitability and size are the most important consideration of dividend payout decisions by UAE firms
Sajid (2012)	Investigatedividend policy of banks listed on the Karachi Stock Exchange (KSE) for the period 2006-2011	<ul> <li>Strong association between profitability and firm size and dividend policy with</li> </ul>
Afzal and Mirza (2010)	Used three years data (2005-2007) of 100 companies listed on Karachi Stock Exchange (KSE)	Positive association between operating cashflows and profitability and dividend policy
Akbar and Baig (2010)	Data from Companies listed on Abu Dhabi Stock Exchange	Profitability and size are the most important considerations of dividend payout decisions
Fakhra and Sajid (2013)	Data from firms listed on the Karachi Stock Exchange over the period 2007 to 2009	Liquidity, leverage, earnings per share (EPS), and size are positively related to dividend
Al -Malkawi (2007)	Determinants of corporate dividend policy in Jordan for the period between 1989 and 2000	Size, age and profitability of the firms have been found to be the determinant of dividend policy in Jordan
Amidu and Abor (2006)	Data from companies 22 frims listed on Ghana Stock Exchange (GSE), 76% of listed firms in between 1998 and 2003	There is a positive association between profitability and dividend policy; and liquidity and dividend policy
Ali, A et al. (2017)	Investigate the relationship between dividend payout choices and firm characteristics of 24 firms listed on the Tunisian Stock Exchange from 2010 to 2015	The results shows that higher dividend payout is associated with higher percentage of financial performance.
Nnadi and Akpomi (2008)	Studied the impact of taxes on the dividend policy of Nigeria banks .	Findings support capital gains in lieu of dividend for high taxpayers
Abdelsalam et al. (2008)	Dividend policy of 50 listed firms in Egypt for the period 2003-2005	Significant positive association existed between institutional ownership and firm's efficiency
Asamoah. (2010)	Studied dividend announcements made in 2005 using 3 companies listed on Ghana stock Exchange(GSE)	Ghana stock Exchange was not semi- strong efficient.

Table 3: Highlights of laws, rules and regulations that affect dividends

Year	Relevant law/ country	Remarks
1990	CAMA 1990 (Nigeria)	Prohibited company's from acquiring their own shares and were only permitted to do so in Limited circumstances
2020	CAMA 2020 (Amended) Part 4 (Nigeria)	• S.184–187 set out the law in relation to purchase of shares by a companies of its own share and treasury shares
2019	Finance Acts (2019)	• S.23 exemptions of withholding tax on dividend
2020	Finance Acts (2020). Amendment 60 and CAMA 2020 (Amended) Nigeria	S.432 (1)-(4) on rights of shareholder to claim for dividend (Treatment of unclaimed dividend and return of money)
2007	Investment and Security Act (Rules and Regulations) Nigeria	Rule 44(1) on sundry amendment on payment of dividend and returns of unclaimed dividend and treatment of paying companies and utilization
2014	Pencom Reform Acts 2014, Part xii on investment of Pension fund	Part xii on investment of fund.     Minimum amount to be invested in stocks/ shares by PFA
2011	Company income tax Acts 2011 (Amended)	• S.18,19,20 and 21 on company dividend and profits, and S.26- S.30 and S.32 – S.40 on withholding tax exemptions



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