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CAPITAL STRUCTURE AND DIVIDEND POLICY OF LISTED INDUSTRIAL GOODS COMPANIES IN NIGERIA: MEDIATING EFFECT OF PROFITABILITY

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Abstract

The main objective of this study is to determine the mediating effect of profitability on the relationship between capital structure and dividend policy of listed industrial goods companies in Nigeria. Correlational research design was used and data were extracted from the annual reports and accounts of the twelve (12) sampled industrial goods companies listed on the Nigerian stock exchange for the period of (10) years (2011 to 2020). The data were analyzed using OLS regression analysis. Robustness tests namely Multicollinearity, Heteroscedacity and Hausman specification were conducted to validate the results. The findings revealed that operating profit margin has a positive and significant influence on dividend payout ratio of listed industrial goods companies in Nigeria. However, profitability did not significantly mediate the relationship between capital structure and dividend policy of the listed industrial goods companies in Nigeria but the need to maintain going concern cannot be overemphasized. The study concludes that the need for profitability cannot be underestimated in consideration of the fact that without profit dividend may not be paid and will be difficult to maintain going concerned. The study therefore recommends that in order to improve dividend payout ratio, management should reduce the use of debt in the capital structure since debt covenant is detrimental to dividend payout ratio.

Keywords: Capital structure, Profitability and Dividend Policy

Introduction

Shareholders' wealth maximization is the main objective of all privately-owned entities which can be achieve via a rise in price through capital appreciation, or companies pay out a portion of their own profits to shareholders as dividends. However, dividends can affect the price of the underlying stock in a variety of ways. While the dividend history of a given stock plays a general role in its popularity, the declaration and payment of the dividends also have a specific and predictable effect on markets prices.

The use of debt in the capital structure of a company can generate interest expense which can reduce the company's profit. The dividend policy is the determination of the portion of the profits to be given out to the shareholders, Franc-Dabrowska (2009) found that company management limits dividend payment according to the hierarchy theory and prefers internal sources of financing economic activities. In the same vein, the negative relationship between capital structure and dividend policy have been documented by several researcher such as Asad and Yousaf (2014) found that the capital structure has negative effect on dividend policy which means the higher the debt of company will reduce the company's ability in paying dividend. However, Kasim and Rasheed (2015) results show that high proportion of owners' capital in capital structure of the firm and Return on Equity results in higher payout.

The increased of debt in capital structure can lead to agency costs and the threat of bankruptcy. Firm that distributes the dividend provides a positive signal to eliminate investor's doubt about the firm's performance because of the risk of using debt on its capital structure. Hence an important aspect of financial management is the choice of methods of financing for a company asset, this is because if a wrong mix of finance is employed, the performance and survival of the business enterprise may be seriously affected. Therefore, the optimal debt structure is determined by balancing the optimal agency cost of debt and the agency cost of managerial discretion, as such an appropriate capital structure and firm value is critical decision for any organization, the decision is important not only because of the needs to maximizes returns to various organizations constituencies, but also because of the impact such a decision have on an organizations ability to dealt with its competitive environment.

Potential investors are interested in dividends and appreciation in market price of stock, so they pay more attention on the profitability ratios. Managers on the other hand are interested in measuring the operating performance in terms of profitability which measure of the amount by which a firm's revenues exceeds its expenses. Hence, a low profit margin would suggest ineffective management and investors would be hesitant to invest in the company.

However, the optimal dividend policy of a firm depends on investor's desire for capital gains as opposed to income, their willingness to forgo dividend now for future returns, and their perception of the risk associated with postponement of returns, therefore management should not retain income unless they can reinvest those earnings at higher rates of return than shareholders can earn themselves (Brigham and Houston 2009).

Despite the strategic importance of the industrial goods companies to the Nigerian economy, not much attention in research is given to the capital structure and dividend policy with emphasis on mediating role of profitability of industrial goods companies in Nigeria. As such this study will determine the mediating effect of profitability on the relationship between capital structure and dividend policy of listed industrial goods companies in Nigeria with a view to understanding how capital structure and profitability can be used to influence dividend policy, reduce agency problem and enhance the overall performance of these companies.

Conceptual Review

The Concept of Dividend Policy

According to Sujata, (2009) and Ishaku, (2015) The term 'dividend policy' refers to the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholder. In most cases, dividends are paid within the current profits and at some point; they are paid from general services. The other option that is always available to a form for earning circulation is by issue of bonus, which is additional to cash dividend (Kurawa & Ishaku, 2014). The distribution of the dividend by company management is the main duty to stockholders and in that case ranks as one of the significant company decisions (Yousaf, 2018). It has implication for investors, mangers, lenders and other stakeholders (more specifically the claimholders).

The Concept of capital structure

Capital structure has been defined as the relationship which exists between the various classes of capital used by the firm in financing its operations (Uremadu, 2004). Besides, it is the interaction between the firm's internal reserve, the debt capital and the equity capital and preferred stock, to ascertain what capital mix the business organization will adopt in financing its operations. Sujata (2009) also postulate the impact of debt or leverage, since a profitable firm is able to earn at higher rate than it is paying for borrowed funds.

Empirical Review

There are a number of studies on capital structure**,** profitability and dividend for example Al-Najir (2011) examined the relationship between capital structure and dividend policy in Jordanian market using the estimation of both single equation models and structure equation models and examine the joint determinants of capital structure and dividend policy. The findings revealed a positive relationship between debt-to-asset ratio and profitability. The findings further revealed a negative relationship between debt-to-asset ratio and profitability. However, a positive relationship was found between dividend payout ratio, profitability, asset tangibility, and market-to-book and industry classification.

Abdallah (2014) investigated the effect of financial structure, financial leverage and profitability on industrial company's value as a long-term strategic analysis that helps the analyst in predicting future company's value on the light of the mentioned variables in addition to external environment analysis. A sample was selected from Saudi industrial companies listed in Saudi Stock Market amounting Forty-six companies. Secondary data was used covering a period of 2009 – 2012, and analysed with multiple regression analysis. The findings revealed a statistically significant direct relationship between two independent variables: return on equity and capital structure and the dependent variable represented by stock market price. However, the findings revealed an inverse relationship between financial leverage and stock value, and this relationship is not significant, the results further revealed a positive relationship between capital structure and return on equity.

Khoiro, Suhadak and Handayani (2016) examined the relationship between capital structure, firm size, profitability, and dividend policy of property and real estate companies listed in Indonesia Stock Exchange (IDX) from 2009-2012. Secondary data was used and analysed using regression analysis. The result shows that capital structure has a negative and significant effect on profitability but firm size has positive and not significant effect on profitability. But the findings revealed a positive and significant effect of firm size on dividend policy. Besides, higher or lower Capital Structure has no significant effect on Dividend Policy.

However, Soewarno, Arifin and Tjahjadi (2017) examined the mediating effect of leverage and dividend policy on the influence of corporate governance towards firm value. The study used a secondary data of 181 companies listed on the Indonesian Stock Exchange (IDX) in the year of 2014. The results showed that leverage did not mediate corporate governance-firm value relationship, and dividend policy partially mediated corporate governance-firm value relationship

Furthermore, Chandra, Sadalia and Siburian (2017) investigated the effect of capital structure, profitability and dividend policy on firm value of property and real estate companies listed in Indonesia Stock Exchange. The data for the period 2013 to 2015 are analyzed using path analysis at alpha 5%. Capital structure and profitability as independent variable, dividend policy as intervening variable and intrinsic value of firm as dependent variable which is the present value of projected free cash flow to firm. The result revealed that capital structure and profitability have significant effect on intrinsic value of firm. Dividend policy has no significant effect on intrinsic value of firm. The results also show that dividend policy does not mediate the relationship between capital structure and profitability to intrinsic value of firm.

Efni (2017) determined the effect of mediation decisions on investment, and financing decisions influence, the company's risk and dividend policy on firm value. The unit of analysis in this research is company property and real estate sectors listed in Indonesia Stock Exchange continuously for 9 years (2001-2008) that have a complete financial report on the study period. This research study using descriptive and inferential analysis to analysed the data. The findings revealed that company's risk and investment decisions are able to increase the value of the company, while the dividend policy and funding decisions are not able to increase the value of the company.

Monoarfa (2018) analyzed the effect of dividend policy and company size on profitability and company value of consumer goods companies in Indonesia Stock Exchange (IDX). The study used 45 companies and covers 2014-2016. The data was analysed using method of structural equation added by PLS (Partial Least Square) approach. The results revealed that dividend policy has negative effect on profitability, while company size does have effect on profitability. Dividend policy, company size and profitability variable have an effect on company value. However, Profitability did not mediate the effect of dividend policy on company value but it mediates the effect of company size on company value.

Muthoni, Nasieku and Olweny (2018) determined the mediating effect of capital structure on the relationship between ownership structure and financial performance of non-financial firms listed on the NSE. The study adopted longitudinal quantitative research design with random-effects GLS and fixed effects models to analyzed data for 2007-2018. The ownership structure was measured using managerial, institutional, government and retail ownerships while capital structure was measured using leverage ratio. In addition, financial performance was proxed by ROCE and Tobin's Q. The analysis revealed that the capital structure has no significant mediating influence on managerial, government, and retail ownerships and financial performance. However, the study revealed a significant mediating effect of capital structure on the relationship between institutional ownership and quoted firm's financial performance.

Similarly, Gunawan, Pituringsih and Widyastuti (2018) examined the effect of capital structure, dividend policy, companysize, profitability and liquidity of the company's value of manufacturing in Indonesia Stock Exchange for the period 2014 to 2016. The data was analyzed using multiple regressions analysis, the findings revealed that the capital structure, dividend policy, company size, profitability and liquidity have significant positive effect on firm value.

However, Chakraborty, Shenoy and Kumar (2018) evaluate the determinants of dividend payout among the companies in the Indian auto components sector listed on major Indian bourses. The study explores the relationship between dividend policy (dividend pay-out ratio) of the companies and the profitability, capital structure, investments, liquidity and cash flows. ANOVA, correlation analysis and regression analysis were used and the findings revealed that the dividend policy of the companies in the Indian auto components sector is largely influenced by the operating profit, cash from operations, proportion of cash from operations used for financing the investment activities and the proportion of equity in the capital structure of the companies.

In the same vein, Sudiani and Wiksuana (2018) examined the effect of capital structure, investment opportunity set, dividend policy and profitability on the value of manufacturing companies listed on the Indonesia Stock Exchange for a period 2013-2016. Purposive sampling was used to select 24 manufacturing companies, secondary data were extracted from the annual report and account of the companies, and a multiple linear regression analysis was used in analyzing the data. The findings revealed that investment opportunity, dividend policy, and profitability have a significant influence on the firm value; however, capital structure does not have an influence on the value of manufacturing companies in the Indonesia Stock Exchange.
Ismawati (2018) determined the relationship between capital structure, dividend policy and firm's value. The study uses a firm-level panel data as all companies listed at Indonesian Stock Exchange who pays the dividend during the period of 2010-2015. Quantitative research method was used and data was analysed with multiple regression analysis, coefficient of correlation analysis, and coefficient of determinant analysis. While hypothesis was tested using t-test and F test. The findings show that capital structure had significant impact on firm's value, but the dividend's policy had not impacted significantly on firm's value. However, the capital structure and dividend's policy have the influence on firm's value.

Yousef (2018) examined the mediating effects of investment and financing decisions on the impact of capital structure and performance of the Jordanian listed commercial banks for 16 years (2002–2017). Descriptive analysis and inferential tools have been employed to examine the relationship between the variables under study. Basically, Structural Equation Modelling (SEM) through AMOS version 25 and SPSS version 21 were used to analyze the data. The findings revealed that both investment and financing decisions have partially mediated the effect of capital structure on the corporate performance in the Jordanian listed commercial banks, since both direct and indirect regression relationships between the endogenous and exogenous variables were positive andsignificant.

Handayani, Ariyanto, Rasmini &Widanaputra (2018) examined the effect of profitability and institutional ownership on firm value with dividend policy as a mediating variable. The secondary data used are extracted from the company's financial statements for 2014-2016. Data was analysed using path analysis. The results revealed that profitability affects dividend policy, institutional ownership has no effect on dividend policy, profitability affects the value of the company, institutional ownership affects the company's value and dividend policy affects the value of the company. For the results of the mediation effect test, the results revealed that dividend policy has no mediating effect on profitability, institutional ownership and the value of the company.

Silvia and Toni (2020) examined the effect of profitability and capital structure on the company value with dividend policy as a moderating variable in consumption companies listed on the Indonesia Stock Exchange for the 2014-2018 Period. Purposive Sampling was used to obtain15 companies for 5 years. Data analysis tools used was SmartPLS 3.0. The results shows that profitability has positive and significant effect on the company value, capital structure has positive and significant effect on the company value, and dividend policy is unable to moderate the effect of capital structure on the company value.

Achmad, Agus, Mochamad, Kiki, & Charina (2020) determined the relationship between profitability, capital structure, dividend policy and firm value. The path analysis approach was used and the results of the analysis indicate that profitability has a positive and significant effect on firm value and a negative and significant effect on capital structure, while the capital structure has a negative and non-significant effect on firm value. Indirectly, dividend policy moderates and strengthens the effect of profitability on firm value, but on the other hand, the capital structure does not mediate the effect of profitability on firm value.

Altahtamouni, Matahen and Qazaq (2020) examined the effect of profits measured by the return on stockholders' equity for the Jordanian Banks on market value measured by market value to book value for the period from 2008 to 2017. The study applied the indirect impact model to know the ability of capital structure, growth rate and dividend policy as mediating variables to transfer the impact of profits to market value. By using the simple linear analysis and applying indirect effect test model by using the Sobel equation, the findings revealed a positive effect of profits on market value with the presence of debt ratio, growth rate and dividend policy as a mediating variable of that relation.

Irawati and Komariyah (2020) examined the effect of dividend policy and business risk on firm value and capital structure.The study analyzes the role of capital structure on that relationship simultaneously using manufacturing companies listed on Indonesia Stock Exchange (IDX) for the period 2012-2018, The result show that dividend policy and business risk have a positive effect both on firm value and capital structure. In addition, capital structure has a mediating effect on dividend policy, business risk and firm value.

Akhmadi, Nurohman and Robiyanto (2020) examined the role of debt policy and dividend policy as variables mediating the influence of profitability on stock prices of mining companies listed on the Indonesia Stock Exchange (IDX) during the period of 2012–2016. Data was analysed using regression analysis, the findings revealed that profitability had a positive effect on stock prices, but the increasing profitability would not necessarily reduce the debt policy. The increasing profitability did not significantly increase the dividend payout ratio.However, increasing dividend policy would increase the stock prices. The results also revealed that debt and dividend policy did not mediate the influence of return on equity on the stock prices.

Harrison, Chun, Cudia, Tristan, Papa, Raveena and Althea (2020) determined the effect of different firm-specific moderating variables on the relationship between financial leverage and dividend payout of Philippine publicly-listed companies under the property sector for the years 2012–2016. These firm-specific variables were classified into two categories company profile and financial condition. By employing multiple regressions with the interaction model, the results found that business risk has a significant effect on the relationship between financial leverage and dividend payout. Similarly, firm size was determined to be significant to the relationship due to the growing importance of stakeholder relationships to larger and more influential companies. In addition, a significant effect on the relationship between financial leverage and dividend payout was determined from liquidity, tangibility, and non-debt tax shield.

Theoretical Framework

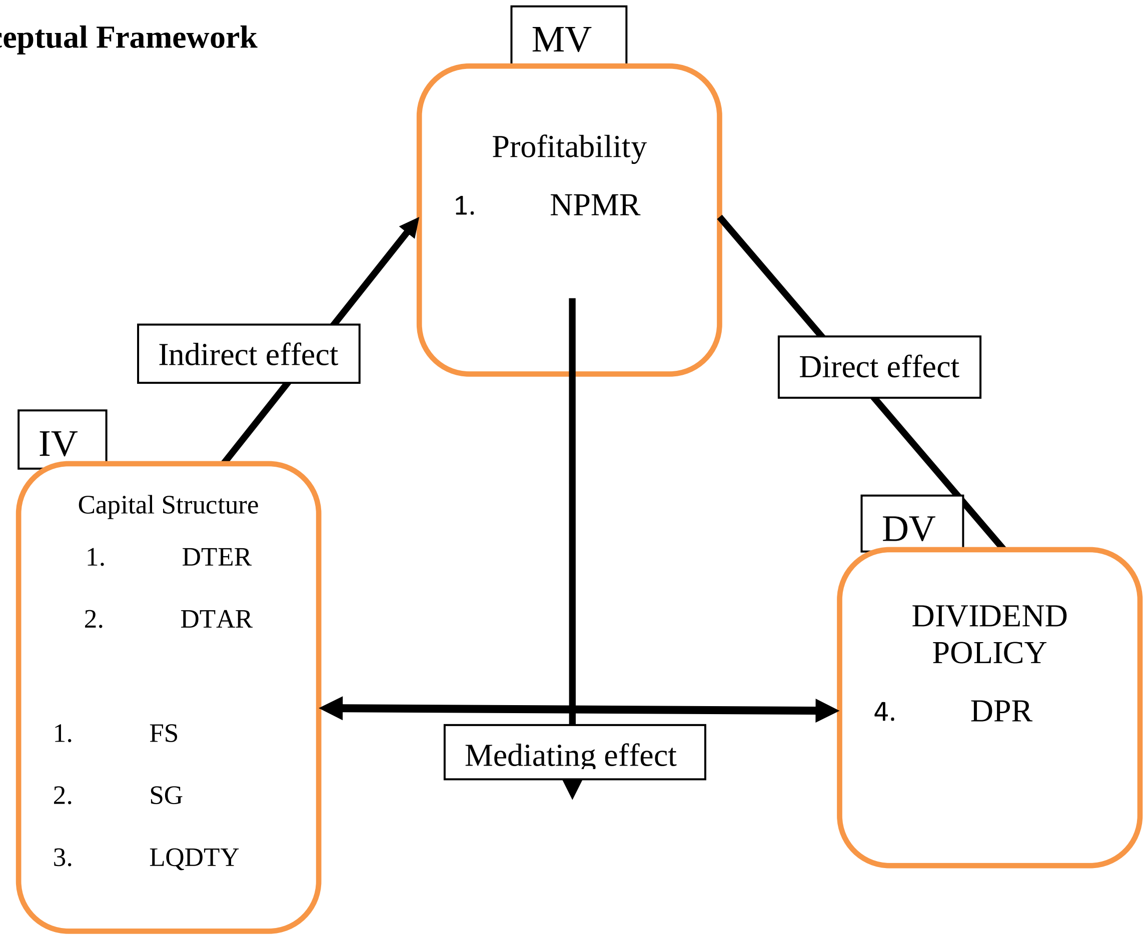
Theory of capital structure can be traced to Miller's and Modigliani's, and the major capital structure theories includestrade-Off theory, pecking order theory, while dividend policy theories include bird in the hand theory, dividend signaling and information asymmetric theory and agency costs theory.

Myers (1993) assert that, a firm with outstanding debt may have the incentive to reject projects that have positive NPV if the benefits from accepting the project accrue to the bondholders without also increasing shareholders wealth. Dividend policy brings information about firm's prospects for profit growth in future where such information may invite a response from investors thus it will affect firm value (Alkuwari, 2009). Asad and Yousaf (2014) found that the capital structure has negative effect on dividend policy which means the higher the debt of company will reduce the company's ability in paying dividend. However, birth-in-the-hand theory of Gordon and Lintner 1963, Baker and Powell (2013) state that investors prefer cash in the hand rather than a future promise of capital gains due to lower risk. Likewise signaling theory, clearly explained that dividend payment signal to outside investors based on asymmetric information. In the same vein, the agency theory introduced by Jensen and Meckling in 1976 explains that dividend can reduce agency costs due to a conflict of interest between agent and shareholder.

On the other hand, payment of dividend can also be used to reduce agency costs (Rozeff, 1982). Distribution of larger cash dividends gives an impression that company will raise finance for existing and future projects to be finance internally through equity Esterbrook, 1984; (Nguyen & Tai, 2017).

Myers and Majluf, (1984) and Al-Kuwari, (2009) recognized that announcements of dividend increases are followed by significant price increases and that announcement of dividend decreases are followed by considerable price drops. Considering the objective of the study, which will be to examine the mediating effect of profitability on the relationship between capital structure and dividend policy, therefore the use of agency theory is considered relevantand therefore adopted as a guide in this study.

Conceptual Framework



Source: developed from the review of existing studies

The framework above shows the expected relationship between the independent variable (capital structure), dependent variable (dividend policy) and the moderating variable (profitability). The use of debt in the capital structure of a company can generate interest expense which can reduce the company's profit. The concept of dividend policy is the determination of the portion of the profits to be given out to the shareholders. Hence company management may limits dividend payment according to the hierarchy theory and prefers internal sources of financing economic activities. However, the concept of profitability will influence the relationship between capital structure and dividend decisions particularly because dividend can only be paid when the company is profitable.

Methodology

This study determined the mediating effect of profitability on the relationship between capital structure and dividend policy and hence correlational research design because the purpose of research under this approach is to establish relationships between measured variables. Secondary data was extracted from annual reports and accounts of 12 selected industrial goods companies out of the 23 listed on the Nigerian stock exchange as at 31 December, 2020.

In trying to determine the variation in dependent variable (dividend payout ratio) due to variation in any of the independent variables, multiple regressions were used. This is because multiple linear regressions are expected to explain the variation in dependent variable due to the variation in any of the independent variables. Hence, multiple regression technique using panel data methodology was suitable and was therefore employed in the analysis of data. This is because the panel characters of the data, that is, its combination of time series, as well as, cross-sectional attributes justified the application of a panel data methodology.

Table 1 Measurement of Variables

Type of Variable	Variable Name	Symbol	Operational Definition
Independent	Debt to Equity Ratio	DTER	Calculated as ratio of total debt to total equity (Andiema& Atieno, 2016; Sudiani&Wiksuana, 2018)
Dependent	Dividend payout ratio	DPR	Dividend per share divided by Earnings per share (Sudiani&Wiksuana, 2018; Chakraborty, Shenoy and Kumar, 2018)
Mediator	Profitability Operating profit margin	OPM	PBT divided by Revenue (Sudiani&Wiksuana, 2018)
Control	Firm size	FS	Log of total assets (Gunawan, Pituringsih&Widyastuti, 2018; Silvia and Toni, 2020; Altahtamouni, Matahen& Qazaq, 2020).
Control	Sales growth	SG	% Change in total sales (Khoiro,

			Suhadak&Handayani, 2016).
Control	Liquidity	LQDTY	Current asset divided by current liabilities (Murage, 2016).

Source: Reviewed Literature

$DPR_{it} = \beta o + \beta_1 DER_{it} + \beta_2 FSIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 LQDTY_{it} + \varepsilon_{it}$---------------(1)

$NPMR_{it} = \beta o + \beta_1 DER_{it} + \beta_2 FSIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 LQDTY_{it} + \varepsilon_{it}$------------(2)

$DPR_{it} = \beta o + \beta_1 NPMR_{it} + \beta_2 FSIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 LQDTY_{it} + \varepsilon_{it}$---------------(3

$DPR_{it} = \beta o + \beta_1 DER_{it} + NPMR_{it} + \beta_2 FSIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 LQDTY_{it} + \varepsilon_{it}$-------(4)

Results and Discussion

This section presents analyses and interprets the data generated for the study,this section presents the preliminary analysis of the sample using descriptive statistics, correlation and then the regression results of the dependent variable dividend policy (dividend payout ratio) and the independent variables capital structure (debt to equity ratio) and profitability. In addition, the hypotheses of the study were also tested and inferences there from.

Descriptive Statistics

Table 4.1 provides summary of statistics for the variables of the study. The summary statistics include measures of central tendency, such as mean, measures of dispersion (the spread of the distribution) such as the standard deviation, minimum and maximum of both the dependent variable and explanatory variables. The table shows the summary statistics of the dependent, independent and mediating variables in order to effectively appreciate the nature of the results. The descriptive statistics provides a basic insight into the nature of the data upon which analysis is done.

Table 2 Descriptive statistics of the variables

Variables	Obs.	Mean	Std. Dev.	Min	Max
dpr |	96	0.2649	0.3417	0	1.3725
opm |	96	0.0951	0.2091	-0.6717	0.4939
der |	96	1.4979	10.9599	0.0074	107.099
fs |	96	10.2284	1.1877	7.8886	12.306
sg |	96	2.1667	13.7674	-0.5760	96.402
lqdty |	96	4.0881	17.5218	0.0239	167.630

Source: Generated from Annual Report Data of the companies using STATA

Table 2 shows the mean of 0.2649 for dividend payout ratio (DPR) meaning that on average the dividend payout ratio of listed industrial goods companies in Nigeria is 26.5% of the total earnings with minimum and maximum of 0 and 1.3725 respectively, the standard deviation of 0.3417 shows that the DPR of the companies under study deviate significantly. The mean of the operating profit margin is 0.0951 meaning that on average listed industrial goods companies in Nigeria generate 9.51% operating profit margin with minimum and maximum of -0.6717 (-6.72%) and 0.4939 (49.4%) respectively, however, the standard deviation of 0.2091 shows that the operating profit margin of the companies under study did not deviate significantly. Debt to equity ratio (DTER) has a mean of 1.4979 meaning on average listed industrial goods companies has 1.498% of debt in their capital structure with minimum and maximum of 0.0074 (0.074%) and 107.0989 (107%). However, the standard deviation of 10.9599 shows no significant variation in the use of debt by listed industrial goods companies in Nigeria within the period under review.

Firm size, measured by the logarithm of total assets has a mean of 10.2284, minimum and maximum of 7.8886 and 12.3059 but the standard deviation of 1.1877 suggests no considerable level of dispersion in size of the listed industrial goods companies during the period under review. Sales growth measured as a percentage change in sales has a mean of 2.1667, minimum and maximum of -0.5760 and 96.4016 but the standard deviation of 13.7674 suggests high level of dispersion in the growth in sales of the listed industrial goods companies within the period under review. While liquidity measured as current assets divided by current liabilities shows a mean 4.0881 with the minimum and maximum of 0.0239 and 167.6302 respectively. However, the standard deviation of 7.9395 shows no much variation in the age of the sampled companies under study

Table 3 Correlation Matrix

Variables	Dpr	Opm	Der	Fs	Sg	Lqdty	vif
dpr	1.0000						
opm	0.4213	1.0000					1.33
der	-0.0919	-0.0489	1.0000				1.03
fs	0.4704	0.4899	-0.1665	1.0000			1.44
sg	0.2225	0.1263	-0.0161	0.2608	1.0000		1.07
lqdty	-0.1198	-0.1648	-0.0268	-0.1428	-0.0292	1.0000	1.04

Source: Regression results computed by the authors using STATA

The correlation results presented in table 3 also indicate that two of the explanatory variables debt to equity ratio and liquidity are negatively correlated with the dividend payout ratio while operating profit margin, firm size and sales growth are positively correlated with the dividend payout ratio. However, multicollinearity an instance where more than two of the independent variables or predictors are correlated implies interdependence among the predictors or independent variables and if high in magnitude, adversely affects the predictive ability of the independent variables. Variance Inflation Factor (VIF) test was carried out, the results of which provide evidence of the absence of collinearity. This is because the results of the VIF test ranges from a minimum of 1.04 to a maximum of 1.44 VIF of 5.00 can still be a proof of absence of collinearity (Samaila 2014). Hence, the predictive ability of the independent variables is not adversely affected by the relationship. The result of the heteroskedasticity test reveals that thereabsence of heteroskedasticity in the model one, two and three because the probability of the chi square is 0.2132, 0.3249 and 0.2329.

Hausman test revealed p-value of 0.8711 in the model and the LM test confirmed it suggesting random effect regression analysis results. Hence random effect regression analysis was interpreted below.

Table 4 Regression Analysis for the Mediating Effect of Profitability on the Relationship between Capital Structure and Dividend Policy

		Mediating Effect Regression Results			
DPR	**Coeff.**	**Std. Err**	**T**	**P>/t/**	
DTER	0.01021	0.0211	0.48	0.630	Not Mediated
FSIZE	0.0369	0.0072	5.11	0.000	Mediated
SG	00008	0.00062	1.36	0.177	Not Mediated
LQDTY	-0.0012	0.00047	-0.25	0.806	Not Mediated
_CONS	-0.3242	0.0722	-4.37	0.000	
R-square			0.2796		
Prob >F			0.0000		
F-value			8.83		
Adjusted R-square			0.2480		
Observations			96		

Note: DTER = debt to equity ratio, FSIZE = firm size, SG = sales growth, LQDTY = liquidity

The result shows that debt to equity ratio has shown a beta coefficient and p-value of (β= 0.0102 and 0.630). It suggests that the profitability did not significantly mediate the relationship between capital structure and dividend policy of the listed industrial goods companies in Nigeria. It shows that debt to equity ratio has a positive but not significant effect on dividend policy through dividend payout ratio. It is evident from the results that, as the level of debt to equity ratio increases, dividend payout ratio increases through the inclusion of another variable as the mediator, that is, profitability. However, this is not significant. Hence, the results support Hypothesis (Ho) of the study, which presumes that the profitability using operating profit margin does not significantly mediate the relationship between capital structure (debt to equity ratio) and dividend policy (dividend payout ratio) of the listed industrial goods companies in Nigeria.

Firm size measured as log of total assets have a positive and significant effect on dividend payout ratio of listed industrial goods companies in Nigeria, this is because larger firms have enough resource which enable them to achieve economy of scale and have reputations, and they will try as much as possible to maintained this reputation by paying dividend to its investors. This is in line with the bird in the hand theory of Gordon (1963). And also consistent with Murage (2016) whose results revealed that larger companies have higher dividend pay-out ratios than smaller companies Ghasemi, Nazrul and Muhamad, (2018) findings confirms that larger firms tend to pay out a higher percentage of dividends per share of listed companies in Malaysia.

Rahman, Sindhu, Khadim and Malik (2018) also confirmed that earnings per share and firm size have significantly influence on the distribution of dividends of the Pakistani banks.

Sales growth measured as percentage changes in sales have a positive but not significant effect on dividend payout ratio of listed industrial goods companies in Nigeria, this is because higher sales indicate higher growth opportunities capable of obtaining higher profit which influence management decisions to pay dividend. This is in line with the findings of Abbsa, Hashim and Chishti (2016) explored the relationship between dividend payout and capital structure of manufacturing sector of Pakistan and found growth opportunities, tangibility and income variability are found to have positive significant relationship with leverage (capital structure).

Firm liquidity as current assets divided by current liabilities has a negative but not significant effect on dividend payout ratio of listed industrial goods companies in Nigeria. This finding is contrary to the aprior expectation because liquidity is expected to influence decisions to pay dividend since illiquidity will be detrimental to dividend payment. However, the negative but not significant effect of liquidity on dividend payout ratio may be as a result of measures taken by industrial goods companies to minimize the effect of Covid19 on their performance of these companies. This finding is also contrary to the findings of Ghasemi, Nazrul and Muhamad, (2018) whose findings revealed that liquidity and performance positively affect dividends per share of listed companies in Malaysia.

Conclusion and Recommendations

This study examined the mediating effect of profitability on the relationship between capital structure and dividend policy of listed industrial goods companies in Nigeria. Based on the findings, it is concluded that the need for profitability cannot be underestimated in consideration of the fact that without profit dividend may not be paid and will be difficult to maintain going concern. Inability to get profit will have a detrimental effect on the decisions of all stakeholders, hence it is concluded that profitability does not significantly mediate the relationship between capital structure and dividend payout ratio of listed industrial goods companies in Nigeria.In order to improve dividend payout ratio, management should reduce the use of debt in the capital structure since debt covenant will deter management from dividend payment. In addition, management should devise strategies necessary to increase company profitability since this will significantly influence shareholders wealth maximization.

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