

Determinants of Dividend Payout Behaviour of Listed Financial Firms

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Abstract

This study investigated the determinants of dividend payout behaviour of listed financial firms in Nigeria. The study utilized and extended the Lintner (1956) model to include other firm specific attributes and macro-economic factors. A sample of 28 financial firms was used for 2012 to 2020 while the panel unit root, co-integration test and panel least square were used for data analysis. Empirical findings confirmed the validity of the Lintner model in explaining dividend payout behaviour among listed financial firms in Nigeria. Specifically, past dividend payout and profitability were found to have a significant impact on dividend payout. Other firm specific attributes (taxation, leverage, firm size) and macroeconomic factors (inflation & interest rate) were found not to be significant in explaining dividend payout among listed financial firms in Nigeria. Also, the study found that listed financial firms in the Nigeria Exchange Limited have a high speed of adjustment of their dividend payment to reflect new earnings in a bid to attain target dividend payment. The study concluded that past dividend reinforces current dividend payout. Premised on the findings, it is recommended that firms set payout dividend policy only when they are sure that such payout can be sustained.

Key Words: Target Dividend, Lintner Theory, Firm-specific Factors, Macroeconomic Factors, Dividend Decision

JEL Classifications: G35, F62, B22

Introduction

Firms make financial decisions that are aimed at value maximisation. One notable and critical financial decision faced by managers is the decision to pay dividend. While firms prefer to retain earnings for investment purpose, shareholders want a consistent flow of income from their investment (dividend). So, firms must carefully determine the amount of earnings to be distributed as dividend to shareholders and to be retained for expansion purpose (Afza & Mirza, 2011). According to Nissim and Ziv (2001) dividend policy is a pre-determined regulation set by an organization to determine when and how to make dividend payment to shareholders. The use of the term 'policy' is used to emphasize the fact that determination of the pattern and size of dividend must be consistent and predictable rather than being a random or arbitrary process (Kazmierska-Józwiak, 2015). Most often, firms usually have a set dividend target either in the short or long term and this is known as a targeted dividend payment. Targeted dividend payment is the payout policy that managers should follow in determining the amount and pattern of cash distribution to shareholders over time (Demirgunes, 2015). Targeted dividend payout has been used to refer to firm's long-run dividend to earnings ratio (Raju & Rane, 2018). Dividend policy is very important and have perceived effect on various issues in the firm such as capital structure decisions (Edet, 2014), share price stability, consistent cashflow and shareholders wealth (Gill, *et al*, 2010).

The dividend policy adopted by a firm is also expected to have an influence on the value of the firm. Increasing and stabilizing dividend payment increases investor's confidence, hence an expected increase in share prices (Raju & Rane, 2018). The signalling theory explains the relationship between dividend policy and firm value through the informational content inherent in dividend payment. The informational content guides firms in choosing a dividend policy that is less likely to send a negative signal to investors. It is in the light of this that most firms choose a stable dividend policy and set a target payout ratio to guide dividend payment (Parasuraman, *et al*, 2012). A stable dividend policy encompasses two parts where one part includes the setting of a target ratio and the other involves the adjustment of dividend payout to meet target payout (Parasuraman, *et al*, 2012; Raju & Rane, 2018). The manager is expected to make dividend decision that will maximize the value of the firm.

Some empirical studies have been conducted to examine firm's dividend payment behaviour and the speed to which they adjust to deviations from set target. The pioneer study of Lintner (1956) was the first to receive attention when he proposed a model now known as the Lintner model to ascertain how firms attain optimal dividend policy based on earnings and past dividend payments as well as the speed at which current dividend adjust to the target. Since this pioneer study, other studies have sought to validate the Lintner model in various markets (Anjali & Raju, 2018; Otieno & Oloo, 2013). Different markets were found to have varying speed of adjustment to target dividend as well as different levels of targeted payout. This inconsistency is expected since markets operate in different environment and more so, different methodologies were employed as well as different time frames investigated. However, since dividend payment may not only be based on firm's earnings and past dividend, the apparent need to extend the Lintners model to include other firm specific characteristics became apparent.

Darling (1957) extended the Lintner model by incorporating other firm specific factors theorized to affect dividend payout behaviour. The study was able to establish that certain other factors like liquidity, cash flow and expectations explained dividend payout behaviour of firms. Also, the studies by Mehta (2012), Edet, (2014) and Kamaraswamy *et al*, (2017) incorporate other firm specific variables such as profitability, size, leverage and liquidity and identified these factors to explain changes in dividend payment behaviour of firms. Other studies like Fapetu, *et al* (2017), Opeyemi *et al* (2018) and Kathuo *et al.*, (2020) have confirmed the same.

Though a myriad of firm specific factors has been examined, much have not been done with economic variables in extending Lintners model. Taxation as an important firm specific factor (Khan *et al*, 2017; Olarewaju, *et al*, 2017) and inflation and interest rate as macroeconomic variables (Ross, 1976; Jablonski and Kuczowic, 2015 and Khan *et al*, 2018) are incorporated in this study to examine the adjustment speed and identify the targeted dividend payout of sampled firms. This study extended Lintners model by introducing macroeconomic and taxation along with other firm specific factors (earnings, past dividend, size and leverage) in testing for the dividend payment behaviour of firms.

The study provides answers to the following research questions:

- i. How does financial leverage affect dividend payout behaviour of firms?
- ii. What is the nexus between earnings and dividend payout behaviour?
- iii. To what extent does past dividend payout affect dividend payout behaviour?
- iv. What is the relationship between firm size and firms' dividend payout behaviour?
- v. How does taxation impact on dividend payout behaviour?
- vi. How do macroeconomic variables (inflation and interest rate) affect dividend payout behaviour?

Literature Review

Concept of Dividend Policy

The term ‘dividend’ is used to refer to the distribution of firm’s earnings to shareholders. Dividend policy according to Das (2020) is a corporate finance decision that centers on the how, when and how much of firm’s earnings should be paid on dividend. Dividend policy also involves the determination of how much to distribute as dividends and how much to retain for investment (Ebire *et al*, 2018). Dividend policy was defined by Zayol *et al* (2017) as a policy that guide the pattern and size of the distribution of earnings in the form of dividend. Dividend policy according to Adeiza *et al* (2020) is a primary element of any corporate policy which is basically the benefits of shareholders for their investment. An optimal dividend policy is expected to lead to higher share prices since investor’s confidence about future earnings is sustained.

Targeted Dividend Payout (TDP)

The term “target dividend payout” was first used by John Lintner in 1956. The Lintners model theorizes how public traded companies set long-term target dividends so as to guide decisions on dividend payout. The Linters model was adopted based on the observation that many companies will set their long run target dividend based on the amount of positive net present value projects that they have available. Target dividend payout (TDP) is used as a measure of how much earning would be paid out as dividend over the long run. According to Parasuraman, *et al* (2012), TDP is used to describe a firm’s dividend earnings ratio in the long run. Firms are careful in setting their target as higher target could send a negative signal that the firm has no intentions for long term growth since all earnings are to be distributed as dividends and this may lead to drop in share prices. However, a low target would indicate that the firm anticipates long term growth and this should be positively related to movement in share price (Feenstra, 2017).

Firm Specific Characteristics and Dividend Payout

Some firm specific factors (leverage, past dividend, earnings, profitability, size, tax) and macro-economic factors (inflation, interest rate) that are determinants of dividend payout behaviour among firms (Paseda, 2020) are discussed here.

Earnings and Dividend Payout: Earnings can be defined to be the excess of revenue over expenses. The term is synonymous with profit, income and margin. Dividend payout has been found to be function of firm earnings (Lintner (1956). Dividend payment are made from firm’s earnings and as such changes in earnings is expected to affect dividend payout. The signalling theory explain the positive relationship between earnings and dividend payout. This relationship was affirmed in the study of Lintner (1956) and Das (2020).

Past Dividends and Dividend Payout: Lintner (1956) was the first to model dividend payout as a function of past dividends. Past dividend also acts as a baseline to which some firms make dividend decisions. Mollah (2009) stated that current dividend is affected positively by the previous year dividend.

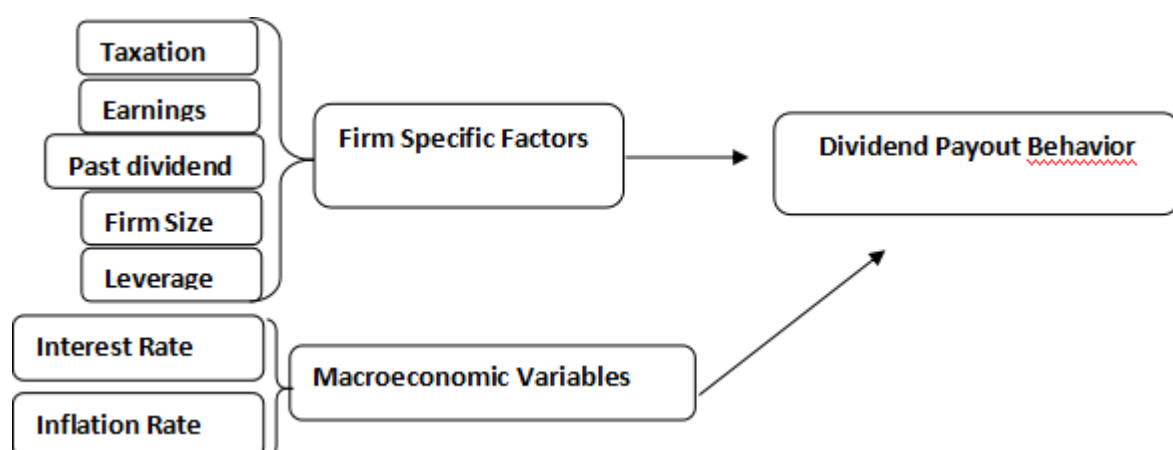
Leverage and Dividend Payout: The use of borrowed funds (debt) to further business operations is known as leverage. Financial leverage is a financial technique were borrowed funds are used to increase profitability. A high degree of financial leverage implies that the firm pays more interest payment to creditors and this impact on firm earnings (Okoye, *et al*, 2017). According to Kathuo, *et al*(2020), increasing leverage leads to lower dividend payout. The

pecking order theory (POT) explains the relationship between financial leverage and dividend payout.

Firm Size and Dividend Payout: Firm size has been used to refer to the ability posed by a firm and the variety and number of production capability. Lumapow and Tumiaw (2017) perceived larger firms to have better growth prospects and they argue that this can influence investor's decision. Larger firms are expected to earn bigger profits and as such are expected to declare larger dividends. This goes to show that firm size and dividend should have a positive relationship. This is substantiated in the studies of Eyigege (2018) and Ahmad (2018).

Taxation and Dividend Payout: Taxation refers to a mandatory or compulsory levy imposed on business firms by the government. The tax preference theory can be used to explain the relationship between taxation and dividend payout. According to the theory, taxation plays a significant role in investors' decisions related to preference of capital gains over dividends (Khan, *et al*, 2017). If taxes do have an impact on dividend policy of a firm, then any change in the taxation structure by the government would bring about change in the dividend policy of the firm (Chuang,*et al*, 2018). The relationship could be positive or negative. It could be negative since higher tax burdens erodes firm earnings which translates into smaller dividends as established in the study of Khan,*et al*(2017).

Macroeconomic Variables and Dividend Payout: Macro economies studies economic phenomenon like inflation, economic growth, unemployment and interest rate. Changes in macroeconomic factors can either boost or inhibit firm's overall performance and this can influence a whole lot of financial decisions which includes capital structure & dividend policies (Khan, *et al*, 2014). Rising inflation creates uncertainty in the market and this have a huge impact on fixed income earners. A way inflation affect dividend payout is through its indirect effect on earnings (Iheduru & Okoro, 2018). The relationship between macroeconomic variables and dividend payout can be explained using the arbitrage pricing theory (APT). The schematic diagram below depicts the relationship between firm specific factors, macro-economic variables and dividend payout.



Source: Authors Conceptualization (2022)

Figure 1: Conceptual Framework

Empirical Review

The examination of dividend payout policies using an adjustment model was first conducted by Lintner (1956). In the study, Lintner investigated the dividend payout behaviour of 600 listed firms and identified earnings and past dividend payout as factors influencing dividend payout. The study revealed a slow adjustment speed of 0.26 indicating that managers were shy in raising dividend simultaneously with earnings not until they were sure earnings was sustainable. Darling (1957) extended the Lintner model in the U.S to include expectations and liquidity in investigating changes in dividend policy. The study proposed a model showing that dividend changes can be explained using current investment, current use of external funds, past dividends and current earnings. The study concluded that lagged profitability better explained changes in dividend payout than current earnings. The speed of adjustment was found to be slow (0.42) indicating that firms smoothes dividend and follow a stable dividend policy.

More recent studies like Olarewaju, *et al* (2017) investigated the dynamics of Lintners model in the dividend payment process of Nigerian banks. The study employed the PMG technique for the period 2006-2015. The study found that the Lintners model holds true but with a negative effect of profitability on dividend payout of banks in Nigeria. Raju and Rane (2018) examined the dividend smoothing behaviour of firms and the implication of Lintners model in Indian metal sector. The study used the pooled OLS, RE and FE models. Result indicated that the sampled firms do not smooth dividend as revealed by the high SOA (0.66) although sampled firms were found to follow Lintners model. Khan, *et al.*, (2018) investigated the relationship between macroeconomic variables and dividend payout for the period 2001-2007. The study employed the use of OLS and result indicated a negative relationship between inflation, interest rate and dividend payout.

Torbira and Otokwala (2019) investigated the determinants of dividend policy decision of deposit money banks in Nigeria for the period 2000-2015. The study employed the use of VECM to estimate the data. Result indicated that earnings and liquidity have a long run relationship with dividend payment while leverage was found to have a weak relationship with dividend payout. The study also found short run causality between variables. Ayunku and Markjackson (2019) examined the determinants of dividend payout policy of listed corporations in Nigeria using time series spanning 2007-2017. The panel regression analysis was used to test the data. Result indicated that leverage had a significant negative impact on dividend payout. Liquidity and profitability had an insignificant positive impact on dividend policies. Firm size was found to be a major determinant in explaining dividend payout decisions among firms.

Abubakar (2020) investigated the asymmetric dividend smoothing in listed industrial goods in Nigeria. The study employed the use of FE model. Findings revealed that industrial goods firms in Nigeria smooth dividend payout and have asymmetric smoothing behaviour. Abdullahi, Adebayo and Aliyu (2020) examined the determinants of dividend policy of listed deposit banks in Nigeria for the period 2013-2019. The panel data regression technique was used and result indicated that profitability and risk were significant in explaining changes in dividend payout. The study of Raj and Dalvadi (2020), examined Lintner's dividend model in the banking sector in India for a 10 years period from 2009 to 2018 using multiple regression. They found that past dividends significantly affect dividend decisions of banks.

After an extensive review of empirical literature, it is clear that this study would provide empirical literature on how macro factors expedite the adjustment speed to target dividend of listed financial firms in Nigeria.

Theoretical Framework

Various theories have been propounded by scholars in an attempt to understand why firm's payout dividend under different assumptions. Some of these theories are The Bird-in-Hand Hypothesis; The Dividend Irrelevance Theory; Tax-Effect Hypothesis; The Clientele Effect; The Signalling Theory; and The Lintners Model. The Lintners model and the signalling theory underpins the present study.

The Lintners model: Lintner (1956) focused on determining the optimal dividend policy for a firm. The model focused on how well firm sets long-term dividend (target dividend) and how firm gradually adjust its dividend payment along with changes in earnings (Speed of adjustment). This study is also anchored on the **Signalling theory**. The signalling theory according to Miller and Modigliani (1961), presents that dividend payments are signals to the market. It posits that where a company engage in paying more dividends, this is seen as positive signal by the investors and tends to appreciate the market value of the stock.

Methodology

This study employs casual research design. The study population encompasses fifty-two (52) listed financial firms as at Dec 31st 2020. The choice of this sector is based on the fact that most firms in the financial sector pay regular dividend which is necessary to carry out this study. However, the filtering technique was used to filter out firms which have not paid dividend for five consecutive years and it brought our sample size to 28 firms with 270 total observations for nine (9) year period spanning 2012-2020. Data was sourced from firms' annual audited financial report and the Central Bank of Nigeria annual bulletin.

The Lintner (1956) model is the theoretical foundation of the study with a functional form given as;

$$Div_t = f(E_t, Div_{t-1}) \quad (1)$$

Where;

$$Div_t = \text{Current dividend} \quad E_t = \text{current earnings} \quad Div_{t-1} = \text{Past dividend}$$

Adapting and extending equation (1) to include other firm specific characteristics and macroeconomic factor

$$Div_t = f(E_t, Div_{t-1}, Lev, Tax, FS, Inf, Int) \quad (2) \quad \text{Where: Lev} =$$

Leverage; Tax = Taxation; FS = Firm size

Inf = Inflation; Int = Interest rate

Further written as

$$Div_t = \alpha_0 + \alpha_1 E_{it} + \alpha_2 Div_{it-1} + \alpha_3 Lev_{it} + \alpha_4 Tax_{it} + \alpha_5 FS_{it} + \alpha_6 Inf_{it} + \alpha_7 Int_{it} + \mu_{it}$$

From Literature, the *a priori* is expected to take the following form (3)

$$\alpha_1, \alpha_2, \alpha_5 > 0; \quad \alpha_3, \alpha_4, \alpha_7 < 0; \quad \alpha_6 > 0 < 0$$

The panel least square analytical method was employed to analyze the model specified for the study. This method was chosen as it has the ability to avoid multi-collinearity problems. Preliminary analysis was done with descriptive statistics and two panel unit root test techniques namely; Levin, Lin & Chu's test (LLC) and Im, Pesaran & shin (IPS). Then the Pedroni panel co-integration test (1999) was employed to test for the presence of co-integration between variables of the study. The Hausman's Test was also used.

Table 1: Measurement of Variables

Variables	Abbreviations	Measurements
Dividend Payout	Div	$\frac{\text{Dividend paid}}{\text{Profit after Tax}}$
Profitability	Prof	$\frac{\text{Net profit after tax}}{\text{Total Assets}}$
Leverage	Lev	$\frac{\text{Total Debt}}{\text{Total Asset}}$
Taxation	Tax	Logarithm of Company income tax
Firm Size	FS	Natural logarithm of total asset value
Inflation	Inf	Annual consumer price index (CPI)
Interest Rate	Int	Market Interest rate (prime lending rate)

Source: Authors Compilation (2022)

Results and Discussions

The result for descriptive statistics is presented in table 2.

Table 2 Descriptive Statistics

Variables	Mean	Std.Dev	Maximum	Minimum	Skewness	Kurtosis	P-value (JaqueBera)
DIV	0.19	0.39	2.22	1.11	-2.10	29.12	0.00
FSIZE	18.75	2.34	23.06	15.06	0.29	1.53	0.00
INF	11.50	2.84	16.52	8.06	0.54	2.05	0.00
INT	7.86	3.08	13.59	4.52	0.73	1.92	0.00
DIV(-1)	0.21	0.27	2.22	-0.01	2.97	19.87	0.00
LEV	0.90	1.42	14.88	0.12	6.90	54.86	0.00
PROF	0.02	0.05	0.43	-0.23	0.06	16.14	0.00
TAX	13.34	2.19	17.70	7.90	0.24	2.33	0.02

Source: Authors computation from E-views 9.0 (2022)

Table 2 shows that on the average, sampled firms paid out 0.19k as dividend per share. The standard deviation is found to be 0.39 thus signifying little deviation among sampled firms. The size of the sampled firms is observed to be 18.75 on the average. Inflation rate is observed to be double digit on the average 11.50. Interest rate is averaged at 7.86. On the average, sampled firms are observed to be highly leveraged as indicated by the average 0.90 with a standard deviation of 1.42 indicating minimal fluctuations in leverage ratio between sampled firms. Profitability ratio is observed to be averaged at 0.02 with a standard deviation of 0.05 indicating a minimal deviation from the series mean.

Findings show that on the average 13.34 (in log) was paid as tax during the period of study. The standard deviation 2.19 also show that there is some deviation in the amount paid out as tax. On the distribution of the dataset, the findings show that all the variables are positively skewed with the exception of DIV that is observed to be negatively skewed. Similarly, all variables are observed to be platykurtic signifying that they are heavily tailed to the right. On the normality of the variables, as indicted by the JaqueBera statistics, all the variables are not normally distributed.

Panel Unit Root Testing: This preliminary test is conducted to ascertain the stationarity of variables.

Table 3 Panel Unit Root

Variables	Levin, Lin and Chu Test (assuming common unit root process)					Im, Pesaran and Shin (assuming individual unit root process)				
	Levels		1 st Diff		Order	Levels		1 st Diff		Order
	Stat	Prob	Stat	Prob		Stat	Prob	Stat	Prob	
DIV	-1.02	0.15	-3.66	0.00	I(1)	0.23	0.59	-1.93	0.02	I(1)
FSIZE	1.36	0.99	-10.98	0.00	I(1)	2.01	1.00	-2.34	0.01	I(1)
INF	-1.44	0.92	-7.97	0.00	I(1)	-1.45	0.09	-10.92	0.00	I(1)
INT	3.15	0.99	-11.94	0.00	I(1)	2.17	0.98	-10.56	0.00	I(1)
DIV(-1)	-2.53	0.08	-12.58	0.00	I(1)	-0.69	0.24	-2.09	0.01	I(1)
LEV	-1.73	0.14	-8.89	0.00	I(1)	-1.17	0.11	-2.92	0.00	I(1)
PROF	-1.63	0.28	-19.63	0.00	I(1)	-2.36	0.17	-5.84	0.00	I(1)
TAX	-2.13	0.01	-6.28	0.00	I(1)	-0.91	0.18	-3.18	0.00	I(1)

Source: Authors computation from E-views 9.0 (2022)

The result of the test suggest that all variables are non-stationary at levels given both assumptions (common and individual unit root process). However, the series became stationary at their first difference given both assumptions.

Panel Co-Integration Test: The Kao co-integration test is used to test for the long run relationship between variables of the study. The Test result is provided below;

Table 4: Panel Co-Integration Test

Kao Residual Cointegration Test		
Null Hypothesis: No co-integration		
	t-stat	Prob
ADF	-3.90	0.00

Source: Authors computation from E-views 9.0 (2022)

The co-integration test result is presented in Table 4. As indicated by the result, the null hypothesis of no co-integration is rejected at the 1% level of significance. The implication of this is that all the variables are in long run equilibrium.

Regression Analysis: The panel least square method is employed for data analysis. The Huasman test is first conducted to select the appropriate model.

Table 5a: Husaman Test Result

Equation	Chi-Sq. Statistics	Chi-Sqd.f.	Prob
DIV	14.4	2	0.00

Source: Authors computation (2022)

The calculated chi square is observed to be large and highly significant at 1% level. Therefore, the fixed effect model is used to make statistical inference in this study.

Table 5b: Regression Analysis (Model 1 with fixed effect)

Variable	Beta Coefficient	t-statistic	P.value
Prof	0.21	3.66	0.00**
Div(-1)	0.19	2.77	0.01*
C	0.18	6.28	0.00**
R-Square	0.35		
Adjusted R-Square	0.25		
F-Statistics (Prob)	3.63(0.00)		
D.Watson	2.11		
Targeted payout $\frac{\alpha_1}{1-\alpha_2}$	0.24		
Speed of Adjustment $(1 - \alpha_2)$	0.79		

Source: Authors computation from E-views 9.0 output. Note that * and ** signifies significance at the 5% and 1% respectively

The result output presented in Table 5b is used to test for the validity of the Lintner (1956) model in which dividend payout was specified to be a function of lagged dividend and earnings. On diagnostics, the R-square is observed to be 0.35 suggesting that the independent variables explain 35% variations in the Dividend payout. The F-stat shows that the model is significant as indicated by the large f-stat (3.63) and relatively low p-value (0.00). On the relationship between the individual relationships, it is observed that profitability which is used a proxy for earnings are positive and statistically significant. This implies that a unit change in profit levels will lead to a change in DIV by 0.21. Therefore, increasing profit levels will imply that firms are more likely to declare more dividend payments.

Similar findings are observed with lagged dividend and current dividend payout. The coefficient is observed to be positive and significant. A unit change in lagged dividend will lead to a 0.02 change in current dividend in specific terms. This finding thus validates the Lintner (1956) assertion that dividend payment is a function of past dividend payment and the levels of earnings/profit. Utilizing the Lintner (1956) partial adjustment model, the target dividend payout (TDP) and speed of adjustment (SOA) is derived from the regression parameters given in the table 5b. Accordingly, the TDP is observed to be 0.24 indicating that sampled firms will strive to payout this amount (0.24) in dividend. The SOA is calculated to be 0.79 which tends to '1' and is indicative that the firms are quick to adjust their dividend payment with changes in dividend payment. This thus implies that these firms do not smooth dividend payment since they are quick in adjusting dividend payment to reflect new earnings in a bid to attain target dividend payment.

To ascertain the degree of changes in the SOA as a result of other firms specific and macroeconomic factors, an empirical test is conducted by including firm specific factors (leverage, firm size, taxation) and macroeconomic factors (inflation & interest rate) to ascertain their impact on dividend payment behaviour. The Husaman test is shown below

Table 6a Husaman Test Result

Equation	Chi-Sq. Statistics	Chi-Sqd.f.	Prob
DIV	50.00	2	0.00

Source: Authors computation (2022)

The calculated chi-square (50.0) is very high and highly significant at the 1% level. It is on this note that this study will use the fixed effect model for statistical inference.

Table 6b Regression Summary (Model 2 with Fixed Effect)

Variable	Beta Coefficient	t-statistic	P.value
DIV(-1)	0.10	2.82	0.03*
PROF	0.25	3.57	0.00**
TAX	-0.01	-0.39	0.69
LEV	-0.00	-0.12	0.90
FSIZE	0.00	0.00	0.99
INF	0.00	0.66	0.51
INT	-0.01	-0.94	0.34
C	0.16	0.08	0.92
R-Square	0.35		
Adjusted R-Square	0.24		
F-Statistics (Prob)	3.09(0.00)		
D.Watson	2.1		
Targeted payout $\frac{\alpha_1}{1-\alpha_2}$	0.13		
Speed of Adjustment $(1 - \alpha_2)$	0.75		

Source: Authors computation from E-views 9.0

From table 6b, reports on diagnostics the R-square is observed to be 0.35 implying that 35% of variations in DIV is explained jointly by the independent variables. The model is observed to be significant overall as indicated by the f-statistics (3.09) at 1% level. On examination of the relationship between study variables, it is observed that the two variables specified by Lintner (1956) are the only significant variables in the regression output. Specifically, profitability/earnings and lagged dividend are observed to be positive and significant. TAX is observed to possess the expected sign although not significant. Particularly, tax is observed to be negative, indicating that higher tax levels leads to lower dividend payment. Similarly, LEV is observed to be negative and not significant. This implies that highly leveraged firms will make lower dividend payments. The coefficient of FSIZE is observed to be positive although not significant. Inflation (INF) is found to be positive and not significant. On the other hand, interest rate is observed to be negative and not also significant. This implies that changes in these macroeconomic factors (INF and INT) have no relationship with dividend payout.

Adopting and extending the Lintner (1956) partial adjustment model, other firm specific factors and macro-economic factors are included to ascertain the changes in the SOA and TDP of sampled firms. The TDP is calculated to be 0.13, indicating that firms will strive to meet this target with an adjustment speed of 0.75. This SOA is still quite high indicating a quick adjustment to TDP. However, a fall is observed with respect to TDP and SOA which indicate that the inclusion of other factors affected the speed at which firms adjust as well as the TDP.

Discussion of Findings

Findings showed that the Lintners (1956) model held true in the case of listed financial firms in Nigeria. Specifically, profitability/earnings were found to be positive and significant. This suggests that increased earnings lead to increased dividend payout among these firms. Higher profit levels will imply higher distributable funds for shareholders. This study follows the signaling theory, where a positive relationship is theorized to exist between profitability and dividend payment. Higher dividend payout tells the public that the firm has high earnings and vice versa. This therefore follows that firms with high earnings are expected to pay higher dividend. This finding follows *a priori* and also confirms the submissions of Raju and Rane (2018) and Abdullahi, Adebayo and Aliyu (2020) whose studies found a positive relationship

between profitability and dividend payment. Past dividend was found to be positive and significant. This is in line with the original assertion of Lintner (1956) that dividend payment is a function of previous dividend paid out. Since firms that cut dividend can be perceived as financially ailing, firms will want to keep up dividend payment so as to reassure investors of the firm's health. This finding follows the information asymmetry theory that states that firms will pay out dividend so as to communicate the welfare of the firm since investors have no knowledge of the internal affairs of the firm. This finding is in tandem with the *a priori* expectations and follows the submissions of Raj and Palvadi (2020) whose studies found a significant positive relationship between past dividend and dividend payout behaviour.

Findings from this study also showed that taxation and leverage have a negative but not significant relationship with dividend payout. Increased taxation will imply lower funds to be distributed especially as taxes are paid out from firm's profits. This was found to be in line with *a priori* and follows the submission of Khan, *et al* (2017) that found a negative relationship between taxation and dividend payment. The leverage finding follows the pecking order theory that firms arrange their source of financing from less risky to more risky. This finding also validates the findings of Ebire, *et al.* (2018) Odum and Odum (2017) and Khan, *et al* (2019) where the relationship between leverage and dividend payment have been found to be negative. Also, firm size was observed to be positive although not statistically significant. The positive relationship implies that bigger firms are expected to earn bigger profits and as such are expected to declare larger dividends. This finding follows the submissions of Ayinka and MarkJackson (2019) whose study found a positive relationship between firm size and dividend payment. The macroeconomic factor of inflation rate was found to have a positive influence on dividend payout although the relationship was not significant. Also, interest rate was found to be negatively related to dividend payment and not significant.

From the discussion so far, it becomes very clear that only past dividend and profitability as mentioned in the earlier study of Lintner (1956) are significant determinants of dividend payout among listed financial firms in Nigeria. Findings suggest that listed financial firms in Nigeria have a very high SOA (0.79) thus suggesting that these firms do not smooth dividend payment since they are quick to adjust dividend to changes in earnings. However, when we control for other firm-specific factors and macroeconomic factors we observed a fall in the SOA and the TDP. The SOA dropped from 0.79 to 0.75 indicating that these factors controlled for has significant influence on the SOA of firms although they were found to have no significant influence on dividend payment.

Conclusion and Recommendations

Given that dividend payment decision is a crucial corporate responsibility as it affects firms' value, finance managers must then be able to identify factors that can be used in predicting movements in dividend payout. It is in the light of this that this study was embarked upon to consider the determinants of dividend payout behaviour of listed financial firms in Nigeria. To guide the study, the validity of Lintner (1956) model was tested using data from the financial sector of the Nigeria Stock Exchange. The model was also extended to include other factors capable of influencing dividend payout as well as its adjustment speed. Premise on findings, the study concludes that the Lintner (1956) model holds true for listed financial firms in Nigeria. Furthermore, taxation, firm size, leverage, inflation and interest rate were found to have a linkage with dividend payout behaviour, however, these factors are weak determinants of dividend payout behaviour of listed financial firms in Nigeria.

The results provide strong background for these recommendations for policy makers and management.

- i. Since past dividend reinforces current dividend payout, it is recommended that firms set payout dividend policy only when they are sure that such payout can be sustained since a drop in such payout can be interpreted as financial ailment.
- ii. Dividend payment should be smoothed with earnings. This is important as a quick adjustment to current earnings level can have a medium-long term impact on dividend payment.

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LIST OF FIRMS

SN	COMPANIES	YEARS
1	Africa Prudential	2012-2020
2	Custodian investment plc	2012-2020
3	Access Bank	2012-2020
4	Eco Bank	2012-2020
5	Fidelity Bank	2012-2020
6	First Bank Holding	2012-2020
7	First City Monument Bank	2012-2020
8	Guaranty Trust Bank	2012-2020
9	Stanbic Ibtc Holding	2012-2020
10	Sterling Bank	2012-2020
11	Union Bank Of Nig	2012-2020
12	United Bank For Africa	2012-2020
13	Zenith Bank	2012-2020
14	African Alliance Insurance	2012-2020
15	Aiico Insurance	2012-2020
16	Axamansard Insurance	2012-2020
17	Consolidated Hallmark	2012-2020
18	Cornerstone insurance plc	2012-2020
19	Guinea insurance	2012-2020
20	Lasaco assurance	2012-2020
21	Linkage assurance	2012-2020
22	Mutual benefits assurance	2012-2020
23	Nem insurance	2012-2020
24	Niger insurance	2012-2020
25	Royal exchange plc	2012-2020
26	Jaiz bank	2012-2020
27	NPF microfinance bank	2012-2020
28	Abbey Mortgage Bank	2012-2020