# DIVIDEND POLICY, LIQUIDITY AND FIRM VALUE OF CONSUMER GOODS INDUSTRY COMPANIES IN NIGERIA

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#### **Abstract**

The focus of this study is to determine the effect of dividend policy and liquidity on firm value. The research was conducted on companies in the consumer goods industry sector on the Nigeria Exchange Group for the 2012-2021 period. The population used in conducting this study was obtained from the consumer goods industrial sector companies listed on the bourse of the Nigeria Exchange Group (NGX Group) which have a total of 25 companies. Purposive sampling technique was used and 17 companies were selected that met the condition of regular dividend payment. Panel least regression data analysis technique was used for the study. Secondary data used were obtained from audited financial statements of the sampled companies for the period and Nigerian Exchange Group factbook. The results showed that dividend policy, liquidity and market risk had positive significant relationship with firm value at 5.8198:0.000; 15:6395:0.000 and 1.2805:0.000 respectively indicating 1% significance level. Free cashflow had positive insignificant relationship with firm value while ownership concentration has negative but insignificant causal effect on firm value. R2, the coefficient of determination of 0.8329 reflects that the model explanatory variables account for 83.29% of value of price to book value, the explained variable. It is recommended that adequate level of profitability should be a priority to enable payment of dividend. Liquidity position should be at the acceptable levels and market risk should not exceed tolerance limit.

Keywords: Firm Value, Liquidity, Market Risk, NGX Group, Dividend Policy

#### Introduction

Dividend is a reward given to an investor for taking risk by staking his funds in a firm among competitive investment outlets. It is paid to equity investors, the residual owners of the company. The purpose of building a company is to maximize profits through efficient utilization of existing resources, as well as to grow the value of the company (Nurhayati and Kartika, 2020). The main objective of the management, the agent of the owners should always be to maximize the wealth of the shareholders. The value of a firm is the amount a rational investor will use in arriving at an investment decision within the tolerance risk limit. It is the aggregation of capital invested, retained earnings and goodwill built over the years of existence. A high value determines the level of interest and trust for investors to invest even more (Maurien and Ardana, 2019).

The value of the company is not confined to the company's current performance but is also able to show the future prospects. Firm value is measured using Price to Book Value (PBV) which is a comparison between the market price per share and book value per share (Ramadhan et al., 2018). Dividend policy is a guide arrived at and peculiar to a company as procedure for distribution of dividends from current year company's profits or retained earnings. The market price share reflects the value of shares of the company at a given time determined by market fundamentals in an efficient capital market and it is used as a measure of value of a firm. There are two main school of thoughts on dividend policy; the relevance and irrelevance hypotheses. Modigliani and Miller, 1961 averred that dividend payment is not relevant to the value of a company's share and that what influence a firm's share price is its investment policy and earning capacity of its assets. In their Bird-in-hand preposition, Gordon 1963 and Lintner 1964 hold that a relationship exists between firm value and dividend payout; that dividends are less risky than capital gains since they are more certain.

One of the critical factors a company should consider in its operations is the liquidity position. It shows the ability of the company to finance its current assets in the short-run. Liquidity is measured as the ratio of current assets divided by current liabilities with a threshold of minimum of ratio one to one. Liquidity is the company's ability to meet short-term financial obligation (Hery, 2017). Current ratio which is the comparison of all components of current assets with that of short-term liabilities measures company's ability level. Financial managers will have to settle on basic business and budgetary choices that will meet their goal of expanding shareholders' wealth and firm's value (Farrukh et al., 2017). In that regard, liquidity



will assume an important position. Firm value is imperative as it reflects the company's performance over the years of operations which can affect investors perceptions of the company. Dividend policy is one of the contentious issues on whether dividends are paid out or retained for future investment. Hernomo (2017) and Kurniawan & Putra (2019) suggest that factors that can affect firm value are; dividend, liquidity and profitability policies.

# **Review of Literature**

In the literature, many theories have been propounded to try to explain the relationship between dividends and firm's value. Among these are signaling theory, agency theory and bird-in-hand theory.

# **Signaling Theory**

This theory was propounded by Michael Spencer (1973). The supporting studies of Ross (1977) and Bhattacharya (1979) lay credence to the signaling model. The theory is rooted in the information asymmetry existing between managers as fund users and shareholders as fund providers. It states that managers because of their unique position have access to more information regarding the value of the firm's assets than other outside agents and investors. In view of this and to communicate to outside potential and existing investors, managers seek to use dividend payout to signal to the investors about the financial performance of their firms. Miller & Ross (1985), postulate that managers know more information than investors about the true state of the firm's current earnings and future outlook. The signaling hypothesis avers that a higher dividend payout sends a signal to investors as to the future cashflow or profitability of the firm. Dividend payouts are considered as positive indication of profitability by shareholders and potential fund providers. Chaabouni (2017) noted that dividends have a signaling effect as dividend payment gives the information about a company to the market. The import of this theory to this study is that investors are enticed to stake their fund in a firm only when they have a good signal that such firms are doing good. Dividend policy under this model is therefore considered relevant.

## **Agency Theory**

This theory was first applied by Jensen and Meckling (1976). The theory argues that, dividend policy is influenced by agency costs arising from the separation of ownership and control. This theory holds that managers are likely to engage in wasteful and negative present value investments, even expropriation of funds if measures are not taken to check such behaviours. The proponents of this theory assert that the value of the firm would be decreased by the agency

costs incurred due to actions of non-value-added managers. The conflict of interest between the managers and owners may result into managers not adopting dividend policy that is value-maximizing but would choose the one that maximizes their own private benefits. D's Souza and Saxena (1999) deduced from their study that there is a statistically significant negative relation between dividend policy and the agency cost, they expressed that dividends be paid on a regular basis to decrease agency cost. Also minimizing agency cost, if a manager's personal fortunes were linked to the firm of value, these agency costs could be minimized. According to a study conducted by DeAngelo et al., (2006) reducing free cash flow in an organization by paying more dividend will go a long way to reduce the agency problem of quoted companies. Also, managerial ownership and stock option compensation package could serve as an agency costs reduction strategy, thus increasing the value of the firm. Dividend policy as postulated in this theory is also relevant.

# **Bird-in-hand Theory**

Gordon 1963 and Lintner 1964 propounded this theory. They hold that a relationship exists between firm value and dividend payout. They asserted that dividends are less risky than capital gains since they are more certain. They hold that investors exercising their rationality are usual risk averse and would prefer to receive dividend now than to expect a capital gain in the future that is uncertain. Under the bird-in-hand hypothesis, shares with high dividend payouts are subscribed by investors and, invariably, command a higher market price. They postulated that, outside shareholders prefer a higher dividend policy and that the investors would resultantly value high payout firms more. Amidu (2007) argued that investors would prefer dividends to capital gains because dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize share price. The proponents posit that, investors prefer current dividend, "bird-in-the hand" than; "two in the bush" i.e., future capital gains. Probe future earnings further, future growth and hence capital gains cannot be estimated with certainty and not guaranteed in any reasonable assumption as the firm may lose even its entire market value and go bankrupt. Dividend under this model is equally considered relevant.

Several studies have also been carried out to investigate the relationship and effect of dividends and liquidity on firm's value.

Michael (2019) examined dividend decision and economic value added of quoted Nigeria manufacturing firms from 2008 to 2017 for 15 non-financial companies on the bourse of



Nigerian Exchange Group (NGX Group) using panel data regression analysis technique. He observed that dividend payment has significant positive relationship with firm value. The study concluded that dividend that dividend is relevant in Nigerian firms as investors prefer firms that pay higher, regular dividend over time. Ugwu, Onyeka & Okwa (2020) evaluated the effect of dividend policy on corporate financial performance; evidence from selected listed consumer goods firms in Nigeria. The study used data extracted from the audited annual reports of the listed from 2015 to 2019 and adopting the ordinary least square technique for analysis. The findings showed that dividend policy has positive and significant effect on firm performance.

Akhmadi and Robiyanto (2020) conducted a study on interaction between debt policy, dividend policy firm growth, and firm value of 95 companies listed Kompas 100 index of the Indonesian Stock Exchange for period 2014 to 2018 using multiple linear regression data analysis technique. The study supported dividend relevance theory as dividend payout was found to have positive and significant influence on value of firm. Adam, Buckman & Setordzi (2020) established that dividend has a negative and significant effect on share price of listed companies on the floor of Ghana Stock Exchange (GSE) for the period 2009 to 2018. Penal data regression was used for 14 listed firms. Lucky and Onyinyechi (2019) examined dividend policy and value of quoted firms in Nigeria of 20 listed companies on the bourse of NGX Group between 2008 to 2017 using panel data regression model. The results showed a positive and insignificant effect of dividend payment on firm's value implying that dividend payments have no influence on value creation.

Tahu & Susilo (2017) measured the effect of liquidity, leverage and profitability on the firm value of 25 listed Indonesian firms for the period 2010 to 2016 using ordinary least square data analysis model. The results found that liquidity has a significant positive association with firm value. In accordance with study conducted by Gunawan et. al., (2018), it states that liquidity has a significant positive effect on firm value which means that if company's liquidity increases, the company's value will also increase. Likewise, study conducted by Farooq & Masood (2016), concludes that liquidity has a significant positive effect on firm value, where liquidity is used as the basis for financial policy in managing the company's working capital. Putri and Wiksuana (2021) studied the effect of liquidity and profitability on firm value of 11 companies listed on the Indonesian IDX for period between 2015 to 2019. Path analysis model was used for data analysis. The results indicated that liquidity has a significant negative effect on firm value.

company in Nigeria

Methodology

The study adopted a correlational and ex-post facto research design. The population consists

of 25 listed consumer goods firms on the floor of NGX Group as at 31st December, 2021. A

total of 17 quoted companies were sampled based on a key criterion of payment of dividend

for the period of 2012 to 2021. The sampling technique employed is purposive sampling. The

total sample size used as observation were 17 companies in consumer goods industry section

of NGX Group for ten (10) year's period 2012 to 2021.

3.1 Model Specification

The model applied for this study is similar to that of Arsal (2021) in his study on "Impact of

Earnings Per Share and Dividend Per Share on Firm Value" stated as:

PBVit= $\beta$ o+ $\beta$ 1DPSit+ $\beta$ 2LIQit+ $\beta$ 3MKRit+ $\mu$ it

In order to allow for robustness and more detailed research, other related variables like free

cashflow and block ownership were included in the econometric model as stated thus:

PBVit= βo+β1DPSit+β2LIQit+β3MKRit+β4FCFit+β5OWNCit +μit

Where:

βo: the econometric equation intercept or constant

β1-5: econometric regression slope/coefficient

Dependent Variable: Price to Book Value (PBV)

Independent Variables: Dividend per share (DPS), Liquidity (LIQ), Market risk (MKR), Free

Cashflow (FCF), and Ownership concentration (OWNC)

μ<sub>i</sub>it: error term/stochastic variable

i: selected listed consumer goods companies in Nigeria

t: time dimension of the variables

3.2 Estimation Procedure

Ordinary least square (panel regression) technique was used to analyze data. Hausman's fixed

and random effect specification test was examined for consistency in arriving at certain and

robust conclusion. Descriptive and pairwise correlation statistics were used to make more

deductions from the sample size tested in this study.

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## 3.3 Measurement of Research Variables

Price to Book Value (PBV): (Ramadhan et al., 2018) concluded that firm value is measured using Price to Book Value which is a comparison between the market price per share and the book value per share.

Dividend per share (DPS): Dividend per share is the amount declared as dividend divided by number of ordinary shares in issue;

Liquidity (LIQ): Liquidity is measurement of current ratio which is the ratio of current assets to current liabilities;

Market risk (MKR): Market risk is the Standard deviation of earnings before interest and tax to total assets:

Free Cash Flow FCF): Free cash flow is measured as net operating cashflow less capital expenditure divided by total asset;

Ownership concentration (OWNC): Ownership concentration is the share ownership of all the block shareholders with 5% and above holding divided by number of outstanding ordinary shares.

#### 4. Results

**Table 4.1. Descriptive Statistics** 

TARIARI EC	MEAN	3.6437	MDI	GED DEV	ODI
VARIABLES	MEAN	MAX.	MIN.	STD. DEV.	OBV.
					(N)
PBV	71.505	1133.13	0.46	200.447	170
DPS	2.982	68.20	0	9.60	170
LIQ	1.276	15.87	0.31	1.289	170
MKR	12.133	357.90	0	40.445	170
FCF	0.776	0.6	78	0.180	170
OWNC	64.254	87.0	0	13.631	170

Source: Author's Computation, 2023

From Table 4.1, the average value of dependent variable, price to book value (PBV) is =N=71.51, and a standard deviation of =N=200.45. The maximum and minimum values are =N=1,133.13 and =N=0.46 respectively. The dividend per share (DPS) has a maximum value of =N=68.20 and minimum value of =N=0.0. Its mean value is =N=2.98 with standard deviation value of =N=9.60. For the period, the average liquidity ratio (LIQ) is 1.276 while the

standard deviation is 1.289. the minimum and maximum liquidity ratios were 0.31 and 15.87 respectively.

For the time, the market risk ratio (MKR) has an average of 12.13 percent and maximum of 357.9. Its minimum and standard deviation ratios were 0 and 40.45 in that order. For the time under evaluation, the mean free cashflow (FCF) was =N=.78 and standard deviation of =N=0.180. Minimum and maximum values were =N=-0.78 and =N=0.6 respectively. Furthermore, ownership concentration (OWNC) average value was 64.54 percent and standard deviation 13.63 percent. Minimum and maximum values are 0 and 87.0 percent.

#### 4.1 Panel Least Square Regression Result

Table 4.2. Fixed – Hausman Test

Dependent Variable: PBV Method: Panel Least Square Date: 29/6/2023 Time: 16:43 Sample: 2012-2021

Sample: 2012-2021 Period included: 10

Variables	Coefficients	Std Error	t-Statistics	Prob
С	35.9046	44.7713	0.80	0.424
DPS	5.8198	.8952	6.50	0.000
LIQ	15.6395	3.9115	4.00	0.000
MKR	1.2805	.1705	7.51	0.000
FCF	17.3488	27.7575	0.63	0.544
OWNC	2804	.6972	-0.42	0.679

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-Squared: 0.8329 Number of Obs: 170 Number of groups: 15 F-Statistic: (5, 145) = 27.23 Prob (F-Statistic): 0.000

F test that all u i = 0: F (14, 145) = 8.94

Source: Econometric views: (Stata 13) output

The F-statistic is used to test the joint effect of the independent variables on the dependent variable. It tests the hypothesis that:

Ho:  $\beta 1=0$ ,  $\beta 2=0$ ,  $\beta 3=0$ ,  $\beta 4=0$ ,  $\beta 5=0$  (there is no joint effect)

H1:  $\beta1\neq0$ ,  $\beta2\neq0$ ,  $\beta3\neq0$ ,  $\beta4\neq0$ ,  $\beta5\neq0$  (there is joint effect)

**Decision rule**: if the Prob(F-statistic) is less than the significance level of 0.05, reject the null hypothesis that all parameters are equal to zero.



### 4.2 Results Interpretation

The Prob(F-statistic) from the result is 0.000, and the null hypothesis that all the parameters equal to zero is rejected. This indicates that all the variables have significant joint influence.

The R-squared coefficient of determination measures the degree of variation in the dependent variable (PBV) explained by the variation in the independent variables. The R<sup>2</sup> is 0.8329 as a result, the changes in the explanatory variables of dividend per share, liquidity, market risk, free cashflow and ownership concentration account for about 83 percent of the variation in the price to book value (PBV).

On the assumption that all other variables are held constant, the intercept value of 35.9046 indicates that price to book value will increase by 35.9046

Deduced from its coefficient of correlation, the dividend per share (DPS) and price to book value (PBV) have a positive significant relationship of 5.8198. The association is also statistically significant at p-value of 0.000 which is lesser than the threshold significance level of 0.05. This result is supported by studies carried out by (Michael, 2019; Ogwu et al., 2020; and Akhmadi & Robiyanto, 2020). The research results of (Lucky & Onyinyechi, 2019; Adam et al., 2020; Ogege, 2020 & Ojogbo et al., 2022) failed to align with this finding.

With a coefficient of 5.8198, the association between liquidity (LIQ) and firm value (PBV) was found to be positive. Given a p-value of 0.000, which is lesser than the 0.05 level of significance, the relationship is statistically significant. Research carried out by (Tahu & Susilo, 2017; Farooq & Masood, 2016 & Lukita & Ariesta, 2019) provided support for this finding. On the other hand, findings from the study done by Putri & Wiksuana (2020) recorded a negative and significant relationship with firm value.

The relationship between market risk (MKR) and firm value (PBV) was established to be positive and positively significant, with a coefficient and p-value of 1.2805 (0.000). Free cashflow and ownership concentration were found to be statistically insignificant at coefficient and p-value of 17.3488 (0.544) and -0.2804 (0.679) respectively.

## **Conclusions**

Evidenced from the results of the panel least square regression of the Hausman test fixed effect, it can be averred that:

There is positive significant relationship between dividend per share and price to book value of quoted consumer goods companies on the NGX Group for the period under consideration i.e., 2012-2021;

There is positive significant relationship between liquidity and price to book value of quoted consumer goods companies on NGX Group for the period under review;

There is positive significant relationship between market risk and price to book value of quoted consumer goods companies on the floor of NGX Group for the period, 2012-2021;

It was observed that both free cashflow and ownership concentration have positive and negative insignificant relationship with price to book value respectively for the period;

A combine impact was observed to exist between the dependent variable (proxy by price to book value) and the explanatory variables of dividend per share, liquidity, market risk, free cashflow and ownership concentration.

In view of the conclusions of the study, the following recommendations are imperative for consideration:

Management needs to ensure efficiency in managing the resources on companies in such a way to facilitate sustainable profitability that will enable payment of dividend as investors used it as metric for firm's value;

In order to ensure smooth and uninterruptible operations, management should always ensure acceptable level of liquidity as it has been found to be key to firm's value accretion;

Adequate attention should be placed on risk profile of companies and government policymakers should do more in the area of easy of doing business policies to reduce risk exposure of companies.

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