

Effect of Ownership Structure on Stock Returns of Listed Consumer Goods Companies in Nigeria

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Abstract

Ownership structure is a corporate governance attribute that reinforces the assurance that stockholders receive favourable returns on their investment. This study examined the effect of ownership-structure on stock returns of listed consumer-goods firms on the Nigerian Exchange Group (NGX). The individual- as well as the combined-effect of ownership-concentration, managerial-ownership and institutional-ownership on stock returns were investigated, using the ex-post facto research method. A purposive sampling technique was used to obtain the sample size of sixteen (16) firms selected from the total population of the twenty-three (23) listed consumer-goods firms on the Nigerian Exchange Group as at 2020, ensuring that every selected company had complete information in the study period (2011-2020). Ten-year cross-sectional data were then extracted from the annual reports of the sampled firms for analysis. Pooled OLS regression technique (as dictated by the Lagrangian multiplier test) was employed to analyse the panel data. Diagnostic tests confirmed model's goodness-of-fit, that assured reliable results. Ownership-concentration and institutional-ownership had significant effect on stock returns of quoted consumer-goods companies in NGX. The study thus concluded that ownership-structure was one of the monitoring mechanisms that could curb managerial opportunistic behaviour against increasing stock returns volatility, thereby ensuring favourable returns on investment. Recommendation was that consumer-goods companies should encourage higher institutional shareholding and ownership-concentration, as this would exert stronger external control to oblige managers for justifiable dividend payout.

Keywords: *Ownership Structure, Stock returns, Ownership concentration, Managerial ownership, Institutional ownership, Pooled OLS regression.*

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Background to the Study

The major objective of corporate governance is to make sure that investors receive a reasonable return on their investments (Shleifer and Vishny, 1997). External shareholders may prefer dividends instead of capital gain when they feel a possible expropriation by insiders, and this preference is higher in emerging markets due to weak investor protection (Mitton, 2004). The responsibility of ensuring investor protection may spring from good corporate governance, which in turn can derive power from ownership structure, and this raises the importance of ownership structure firm policy. Accordingly, in their submission, Shahid, Gul, Rizwan, and Bucha (2016) pointed out that "the impact of ownership structure on firm policy is growing in importance by reason of the prevalence of complex ownership structure", both in the developed markets and the emerging markets, alike. Thus ownership structure may be considered an imperative corporate governance attribute that can assist in ensuring that investors receive a reasonable return on their investments (Shleifer and Vishny, 1997). It helps not only to improve the informativeness in stock prices, but also enhances the efficiency of corporate governance, plus increasing the quality of published corporate information (He et al., 2013; He and Shen, 2014); ownership structure also enables the problem of representatives in the operation of listed companies to be solved while limiting the information asymmetry on the stock market (Gul et al., 2010; Kang and Stulz, 1997; Jiang and Kim, 2004).

Ownership structure also has the quality of reducing the cost of information gathering, lowering transaction costs for investors, thereby decreasing the capital costs for companies (Fernandes and Ferreira, 2009; Healy, 1985). From simplistic understanding, ownership structure consists of the ratio of equity owned and held by internal members and external investors outside the company. Shleifer and Vishny (1997) argued that "if the equity concentration approach is taken, the ownership structure is composed of: the ratio of equity held by the major and dispersed shareholders of the company". For clarity in the current study, ownership structure is considered from the point of view of three indicators, viz, Ownership concentration, Managerial ownership and Institutional concentration. The ownership composition of a firm is considered to have a strong influence on stock returns, as there is a general belief that the higher the ratio of institutional ownership, the stronger the external control of the company, which may lead to encouraging managers to increase dividend payments. But the demerit here is that the closed corporate governance system associated with high ownership-concentration means that the outside investors have little information and there is a high probability of insider-trading. Again, Managerial ownership refers to the percentage of equity owned by insiders, where insiders are defined as the officers and directors of a firm (see Khan et al., 2020). Managerial ownership may affect firm performance positively as it is expected that directors will make good decisions because they partly own the firm hence their interest in the decisions made. The stock price should thus increase with more shares being held by directors. Managerial ownership reduces agency costs for a firm because there is no longer a need for an incentive system to lure the management into performing well. Thus, such incentives like bonuses pegged on profit achievement can easily be eliminated because at the end of the day, the directors will share in the dividends. But prevalence of the contrary may lead to chaos and increase in agency cost. This means "the free cash flow (FCF)

hypothesis" (closely linked with the agency cost theory), will be evoked, and increased agency cost will prevail as a consequence of the divergences of interests among management and shareholders (Shahid et al., 2016).

Empirically, for some inexplicable reasons, very little has been written on ownership structure and stock returns of Nigerian quoted companies, in spite of the rapid growth of Nigerian firms after independence. A majority of the studies that sought to evaluate the link between ownership structure and stock return generated results that at best could be regarded as mixed. For instance, some studies revealed that there was no significant relationship (see Uwabanmwun and Obayagbona, 2012; Umar and Musa, 2013; Olowoniyi and Ojenike, 2013). In contrast however, some other studies revealed a significant relationship between ownership structure and stock returns (e.g. Bala and Idris, 2015; Akwe, Garba and Dang, 2018).

This study attempted to upgrade the current corpus of knowledge regarding equity ownership structure and stock returns in an emerging market, with the Nigerian consumer goods sector as a special focal point of interest; with the principal objective of examining the effect of firm ownership structure on stock returns of listed consumer goods companies in Nigeria. Such is justifiable because evidence of relationship between ownership structure and stock returns, or otherwise, would enable firms to make appropriate choices about ownership structure mix that would create and improve firm value and hence stock returns. Thus the specific objectives included

- (i) Identifying the effect of ownership concentration on stock returns of quoted consumer goods companies in Nigeria
- (ii) Determining the effect of managerial ownership on stock returns of quoted consumer goods companies in Nigeria
- (iii) Examining the effect of institutional concentration on stock returns of quoted consumer goods companies in Nigeria. These specific objectives are re-stated as null hypotheses:

H₀1: There is no significant effect of Ownership concentration on stock returns of quoted consumer goods companies in Nigeria

H₀2: Managerial Ownership has no significant effect on stock returns of quoted consumer goods companies in Nigeria

H₀3: Institutional concentration has no significant effect on stock returns of quoted consumer goods companies in Nigeria

The remaining part of this study housed Literature review covering 'conceptualisation', 'theoretical framework', and 'empirical studies'. The next section covered Methodology of study followed by Data analyses and Result presentation/Discussion. The final section covered Conclusion and Recommendation(s).

Conceptualization Ownership Attributes

In the realm of corporate governance of firms, ownership structures are considered imperative because "they affect not just the incentives of managers but also the efficiency of

the firm". Ownership structure refers to "the distribution of equity with regard to votes and capital as well as by the identity of the equity owners". [Uddin, Khan and Hosen \(2019\)](#) believed that "in a competitive global market, a robust regulatory framework is required to mandate organisational compliance involving policies and procedures to ensure accountability". In corporate governance practices. The overall goal is to ensure corporate governance practices that would increase investors' confidence in stock market stability by committing to financial and management services, such as regular AGM, dividends, information, and accountabilities through sound financial policies—the absence of which would prevent firms from gaining the faith of suppliers, lenders, governmental and regulatory bodies, employees, and investors and may eventually collapse. Of the many Ownership Attributes associated with efficient firm management, three have been considered for this study, including Managerial Ownership, Ownership concentration and Institutional ownership.

Ownership Concentration

This refers to the existence of large block holders in a firm ([Thomsen and Pedersen, 2000](#)). Ownership Concentration signifies the spreading of shares owned by a certain number of individuals or institutions; [Claessens and Djankov \(1998\)](#) described this ownership mix as comprising not just certain institutions but also groups such as government, private companies or foreign partners among the shareholders. The role of ownership structure in the setting of ownership concentration is to assess the cash flow contents with regards to block holder's role in the perspective of diffused ownership. Ownership concentration is also defined and measured as the ratio of number of Shares owned by Major shareholders to Total Outstanding Shares (see [Nazir and Malhotra, 2016](#), [Berle and Means, 1932](#)). Typically, a stockholder who holds 5% or more of company equity is considered a major stockholder. The shareholding of an owner should be significant enough to provide for monitoring the action of the management. The major shareholder can be an individual, a domestic foreign corporation, an institutional investor and or the state. Large block holders have greater incentive to monitor management as the costs involved in monitoring is less than the benefits to large equity holdings in the firm. [Ramsey and Blair \(1993\)](#) pointed out that increased ownership concentration provides large block holders with sufficient incentives to monitor managers. [Demsetz and Lehn \(1985\)](#) and [Stiglitz \(1985\)](#) found that large block holders have the incentive to bear fixed cost of collecting information and to engage in monitoring mechanisms. In contrast dispersed ownership leads to weaker management monitoring. That is in a situation where the shareholders hold lower stock in a firm the incentive to monitor management is low because the costs involved in monitoring outweigh the benefits to be derived. If on the other hand, there are shareholders holding, say a family, then this "large family shareholders can pressure managers to reduce diversification and increase company economic performance" ([Thomsen and Pedersen, 2000](#)). Thus, ownership concentration is understood as "the share of the largest owner and are influenced by absolute risk and monitoring costs". But the argument here is that due to tightness of ownership may allow self-interest behaviour of managers to go internally unopposed by the board of directors which give room to the managers to determine how the company may be run and use the opportunistic behaviour to expropriate minority shareholders' wealth.

Managerial Ownership

The proportionate number of shares held by chief executive, directors, and their family members in a firm is referred to as managerial ownership [Uddin et al \(2019\)](#). It signifies the interest of managers in the equity shareholding of the firm. The motive behind the rise of this corporate governance variable is rooted in the agency theory, which assumes that manager's equity holdings inspire them to act in a way that maximizes the value of the firm. [Warfield, Wild, and Wild \(1995\)](#) suggested that the "interest of both shareholders and management starts to converge as the management holds a portion of the firm's equity ownership", so that the need for intense monitoring by the board should decrease. However, agency idea predicts in contrast that low managerial ownership indicates poor alignment interest among managers and shareholders ([Jensen and Meckling, 1976](#)). The managers with low equity ownership will manage earnings for their better compensation and will avoid debt covenants ([Healy, 1985, Houlthausen, 1995](#)). It is viewed that they will be more sincerely involved in the firm when they own larger ownership, so the need for outside monitoring will be reduced, as long as the interest of insider- and outsider-ownership converges. There are two views concerning managerial ownership. The convergence assumption states that managerial ownership will be seen as monitoring device, when outsiders own some portion of the company equity, thereby scuttling managers' opportunistic behavior; this way, the magnitude of discretionary accruals is predicted to be negatively associated with insider ownership ([Warfield et al., 1995](#)). On the other hand, when there is little separation between managers and outside owners, management faces less pressure from capital markets to signal the firm value to the market as they pay less attention to the short-term financial reports ([Jensen, 1986, Klassen, 1997](#)). Then highly invested managers are more likely to influence earnings, since the lack of market discipline may lead managers to make accounting choices from self-serving interest.

Institutional Ownership

Institutional ownership involves share ownership by other organisations or institutions (e.g. insurance companies, banks, investment companies and other organized owners). It is an important indicator in monitoring management as optimal supervision is encouraged; as it can minimise agency conflicts between managers and shareholders ([Jensen and Meckling, 1976](#)). Agency concept suggests that monitoring by institutional ownership can be an important governance mechanism, because institutional investors can provide active monitoring, smaller or more passive or less-informed investors are unable to do ([Almazan, Hartzell and Starks, 2005](#)). Moreover, institutional investors have the opportunity, resources, and ability to monitor managers, to compel higher performance, as [El-Ghouthy and El-Masry \(2017\)](#) analogized the 2005 International Monetary Fund report that mentioned that "the assets under the [control of institutions](#) have increased three times since the mid of 1990s, and institutional investors have become now the dominant players in most developed countries". There is thus possibility that the efficient monitoring scuttles managers' opportunistic manipulation of earnings (e.g. [Bange and De Bondt, 1998; Chung et al., 2002; Cornett et al., 2008, Ebrahim, 2007](#)).

Considering the importance of corporate governance in firm's management, shareholder's active participation in monitoring management functions is imperative to ensuring good

corporate governance practices, and hence the emerging force exerted by institutional investors' participation in corporate monitoring is a mechanism to protecting minority shareholder's interest. Thus a significant increase in the institutional investors' shareholdings can lead to the formation of a large and powerful constituency to play a momentous role in corporate governance. The active monitoring hypothesis views institutional investors as long-term investors with raving incentives and motivations to closely monitor management action (Jung and Kown, 2002), which will result in quality earnings reporting. It is also believed that institutional ownership enhances firm value. Uddin et al. (2019) asserted that "the agency cost theory predicts that the conflict between shareholders and managers reduces firm value", thus with strong corporate governance, agency cost can reduce through technical management between shareholders and managers. On the contrary however, the study by Wei et al.'s (2005) indicated an inverse relationship between institutional ownership and firm value. In a similar result, Navissi and Naiker (2006) discovered that there was institutional shareholdings had no impact on firm value. Ruiz-Mallorquí and Santana-Martín (2011) made a conclusion that "the effect of institutional ownership on firm value depended on the nature of institutions, such as banks or investment companies and organisational control". In the same vein, some scholars posited that "institutional investors do not play an active role in monitoring management activities"; and that "they are passive investors who are more likely to sell their holdings in poorly performing firms than to expend their resources in monitoring and improving their performance" (Claessens and Fan, 2002; Potter, 1992). In this sense, institutional investors may be incapable of exerting their monitoring role; and may not vote against managers because it may affect their business relationships with the firm. By and large, institutional investors may collude with management (see Pound, 1988, Sundaramurthy, Rhoades and Rechner, 2005). It is also argued that institutional owners are overly focused on short-term financial results, and as such, they are unable to monitor management (Bushee, 1998, Potter, 1992). So, there will be pressure on management to meet short-term earnings expectations. These arguments indicate that institutional investors may not limit managers' earnings management discretion and may increase managerial incentives to engage in earnings management. In fact, Rubin and Smith (2009) believed that more institutional holdings lead to an increase in volatility; accepting this, Sias (1996), tested the "contemporaneous" relationship between volatility and institutional ownership, and found that volatility of stocks increased following an increase in institutional ownership. This current study's working definition is that the dedicated position of institutional ownership to the firm has some uncertainty, and requires more empirical work to verify their absolute loyalty to truly monitor managers' activities because they are likely to compromise situations.

Concept of Stock Returns

Extant literature has delved extensively on the concept of stock returns. In a simplified understanding, Soeharto and Violita (2019) explained it in relation to purchasing stocks (at lower price) and selling such them out (at a higher price) which yields a profit called return—which is the fundamental motive for investment. Clearly, in stock market, the investors invest their savings with an expectation of earning some income. This income may be termed as "stock returns" which may be in the form of profits earned from trading of shares or the dividends received. These dividends may be paid to the shareholders out of the profits

earned; may be quarterly, half yearly, yearly, etc. The stock prices or returns are bound to be affected by various risks occurring within a country and also events occurring across the world. Furthermore, stock returns can be in form of capital appreciation or depreciation (as obtained in the Nigerian Exchange Group), including dividend received if any. Stock prices are important metrics of measuring stock market returns. Thus, the value attached to them matters a lot to in the stock market. Stock market returns are the returns or gains that the investors generate out of the stock market (Lin and Zhan, 2011). Arora and Sharma (2016)'s representation of stock returns is stated mathematically as: $\frac{P_{t-1} - (P_t + Div_t)}{P_{t-1}}$, or

$$\text{Stock returns} = \frac{(\text{Stock price at year } t+1) - (\text{stock price at year } t + \text{dividends})}{\text{Stock price at year } t+1}$$

A stock owned by an investor signifies his share in the ownership of a company—it is a claim on the company's assets and earnings; by this he becomes one of the many owners (shareholders) of the company and as such has a claim (no matter how small) to everything the company owns. The more shares an investor possesses, the greater his ownership rights.

Theoretical Framework

Bird-in-Hand Theory

This may be described as Gordon-Lintner theory in 1963 was developed by Myron Gordon and John Lintner to counteract the Modigliani-and-Millers dividend irrelevance theory. The Gordon-Lintner theory, or the "Myron Gordon's Dividend Growth Model, (or simply Gordon's growth model) identified that "investors prefer current dividends to capital gains"—plugging from the fact that "stockholders are risk-averse and prefer current dividends due to their lower level of risk as compared to future dividends". Dividend payments diminish investor uncertainty and thereby increase stock value. If investors view future dividend payments riskier than current payments, they will prefer a "bird-at-hand than two" in the bush; that is "what is available at present is preferable to what may be available in the future, Consequently a relationship exists between firm value and dividend payment; and firms should therefore set a high dividend payout-ratio and offer a high dividend yield to maximize stock prices (see Linter, 1962; Gordon, 1963; Murekefu and Ouma, 2012). The Gordon's growth model explains how a firm's dividend policy is a basis of establishing share value. The model uses the dividend capitalization approach for stock valuation that determines the value of firm as the quotient of expected dividend one year from now divided by the difference between the required equity-investor's rate of return (k_e) and the dividend growth rate (g). The formula used is $P_0 = \frac{D_1}{k_e - g}$ where: P_0 = Current Stock Price; D_1 = Expected dividend per share one year from now; k_e = required rate of return for investor = Cost of equity; g = Growth rate in dividends in perpetuity.

Markowitz Portfolio Theory

Harry Markowitz first developed the basis of portfolio theory in 1959. The common sense behind the portfolio theory is based on the adage 'do not put all-your-eggs in one-basket'. By this a compensation effect is created in such a way that a risk-reducing consequence of spreading investment across a range of assets; this way, in a portfolio where unexpected bad news concerning one company will be compensated for to some degree by an expected good

news about another. [Markowitz \(1959\)](#) has given the tools, for identifying portfolios that give the highest return for a particular level of risk. The investors can then select the optimum risk-return trade-off for themselves depending on the personal risk aversion. These portfolios of different proportions satisfy a particular level of investor risk tolerance. According to the Markowitz portfolio theory, there is a risk-reducing effect of spreading investment across a range of assets rather than running a single investment. The current authors thus observed that a certainty level on stock returns is achievable if investors observe the doctrine of diminishing risk in their decision-making.

Empirical Review

The quantum of studies on ownership structure and stock returns of firms carried out over the years is monumental, and only a few were reflected here. In Iran, [Rostami, Rostami and Kohansa \(2016\)](#), studied the effect of corporate governance components on return on assets and stock return of companies listed in Tehran stock exchange using 469 firm-year observations collected over a period of seven years. They used 6 internal components of a corporate governance system of ownership concentration, institutional ownership, Board independence, Board size, CEO duality and CEO tenure as independent variables and their effect on return on assets and stock returns, as the firm financial performance evaluation criteria. They included control variables of 'market-value of equity' and the ratio of book-value to market-value of the equity. The results which was based on estimated generalized least square method, indicated that there was a significant positive relationship between ownership-concentration, Board-independence, CEO-duality and CEO-tenure and return-on-assets. However, there was a significant negative relationship between institutional-ownership and Board-size and return-on-assets. Besides there was a significant positive relationship between institutional-ownership, Board-independence, CEO-duality and CEO-tenure with stock-return; but there was a significant negative relationship between ownership-concentration and Board-size with stock-return. The critique here is that their study was done in the Arab environment, whose setting is dissimilar to Nigeria's, and so may not march with studies in Nigeria where there is a sharp economic environmental difference, as so their study findings may not be good enough for direct decision purpose in Nigeria.

In Indonesia, [Afriyani \(2018\)](#), analyzed the effect of managerial ownership structure, institutional ownership and investment opportunities on the performance of stocks in the manufacturing companies listed on the Indonesia Stock Exchange. They employed multiple linear regression analysis, with required diagnostic tests carried out. The results showed that the effect of managerial stock ownership structure had a significant positive effect on the performance of stocks, but institutional ownership had a positive effect, but not significant increase in stock performance; while investment opportunities had significant positive effect on the performance of the stock on the Indonesia stock exchange. Test results obtained showed that managerial ownership, institutional and investment opportunities jointly affected the performance of the company's shares of companies listed on the Manufacturing Indonesia Stock Exchange. This study was done in Indonesia and given the differences in legal and governance stipulations between these countries, the findings of the previous studies may not be directly adopted for informed decision-making in Nigeria. More so, they focused on

performance of stocks in the manufacturing companies, as against consumer goods companies.

Amal (2014), studied the effect of institutional ownership and ownership concentration on firm stock returns and financial performance of the listed companies in the Egyptian Stock Exchange. For this purpose, panel data model is employed. The results from the analysis show that institutional ownership has no effect on *ex post* stock returns as well as *ex ante* stock returns. On the contrary, institutional ownership represented by top management and individuals have a negative and significant effect on stock volatility, while employee associations had a positive and significant effect. No significant effect was detected on *ex ante* risk except for employee associations that have negative and significant effect on *ex ante* risk. In addition, the results show that institutional ownership had no effect on stock liquidity except employee associations and individuals that have a negative and significant effect on stock liquidity. Finally, the results show that institutional ownership represented by companies, holdings and individuals had negative effect on financial performance represented by ROA and ROE. Also, institutional ownership had no effect on debt-to-equity ratio except banks that had negative and significant effect and employee associations that had positive and significant effect. This study considered a mix of other corporate variables as against our's that considered strictly ownership structure variables. Moreover, they used quoted firms in Egyptian Stock Exchange while we considered us from the Nigerian Exchange Group. Moreso, our studies had an age difference of about 8 years. The results therefore may not be taken on first-face observation, but the theoretical connotation is acceptable.

Methodology

This study adopted a descriptive *ex-post facto* research method and positivist research philosophy for the purpose of addressing the research problem. The population of the study comprised all the twenty-three (23) listed (public limited) consumer goods firms on the Nigerian Stock Exchange as at 2020. The study used purposive sampling technique to obtain a sample size of sixteen (16) firms, based on the criterion that each company must have complete information for the number of years under consideration (2011-2020). Required data (secondary in nature) were then extracted from the annual reports of these companies for a period of ten (10) years (2011 to 2020), totaling 160 panel data observations (that is 160 cross-sectional time series data). The study employed multiple regression technique as the procedure of analysis with using STATA version 13 as the analytical tool. In order to check for endogeneity, the study used the Hausman specification test. Additional robustness tests conducted included the multicollinearity using the Variance Inflation Factor (VIF) and the Breusch-Pagan test for heteroscedasticity, which provided check for model fitness and reliability of findings.

Nomenclature and Variable Measurement: The variables used for this study were four in number: Stock Returns as the *Dependent variable*, while the *independent variables* included Ownership- Concentration, Managerial-Ownership, and Managerial-Ownership, all defined on Table1.

Table 1: Variable Measurement

SN	Variables	Definition	Measurement	Construct Validity/Source
1	STR <i>Dependent variable</i>	Stock Returns	Stock price change between current year-end (P_t) and the previous year-end (P_{t-1}) divided by stock price of previous financial year-end (P_{t-1}); that is $STR_t = \frac{P_t - P_{t-1}}{P_{t-1}}$	Soeharto & Violita (2019); Bala & Idris (2014).
2.	OWNCON <i>Independent variable</i>	Ownership Concentration	Measured as the percentage of equity ownership held by the largest three institutional investors (own more than 5%) in a company	Shahid et al (2016); El-Ghouty & El-Masry (2017).
3.	MANOWN <i>Independent variable</i>	Managerial Ownership	Measured by the proportion of number of shares owned by directors/managers to the total number of ordinary shares issued; Could be dummy: if Chairman owns any % of shares, its value is 1 otherwise zero	Bawa & Isa (2014); Wafa & Younes, (2014). Khan et al.(2020)
4.	INSTCON <i>Independent variable</i>	Institutional Concentration	Measured by the proportion of number of equity shares of the firm held by institutional investors (e.g. insurance companies, banks, etc.) to the total number of ordinary shares.	Iqbal et al. (2016); Chung et al.(2002).

Source: Author's Compilation, 2022.

Model Specification:

In consideration of the variables selected for the study, the functional relationship could be stated as, $STR = f(\text{MANOWN}, \text{OWNCON}, \text{INSTCON})$. Mathematically, this is:

$$STR_{it} = b_0 + \beta_1 \text{MANOWN}_{it} + \beta_2 \text{OWNCON}_{it} + \beta_3 \text{INSTCON}_{it} + \epsilon_{it} \dots\dots\dots (i)$$

Where: b_0 = intercept (constant), $\beta_1, \beta_2, \beta_3$ = parameters to be determined through regression analysis; i = cross-sectional, representing firms 1, 2, 3, ... n (n = number of observations); time, t = time periods = year 1, 2, 3, ...t (t = number of years of observation), ϵ = Unique error term.

Results and Discussion

Descriptive Statistics: A summary of the description properties of the variables is shown in Table 2.

Table 2: Descriptive Statistics

Variables	Obs	Mean	Std Dev	Min	Max
SR	160	84.73062	264.197	17	1485
OC	160	0.5958285	0.1879737	0.01	0.861
MO	160	0.0559345	0.0400227	0.001	0.168
IO	160	0.1894311	0.0703284	0.092	0.392

Source: Researcher's Extraction from STATA13 OUTPUT, 2022.

The outcomes in Table 2 indicates that the measure of stock return (SR), which is the inverse of the share price behaviour of consumer goods firms has an average value of 84.73062 with

corresponding standard deviation of 264.197. This is an indication that of significantly high variability around the means of the individual sampled firms. Also, the minimum and maximum values stood at 17 and 1485 respectively. The firms tended to record a significantly high stock returns in some years than in others. For ownership concentration, the table shows a mean value of 0.595829 and a corresponding standard deviation of 0.187974. This shows that an average of 59% of the firms had concentrated owners in their ownership structure; the lowest number stood at 1% while the maximum number was 86%. Similarly, the average managerial ownership was 0.0559345 (about 5%) with a standard deviation of 0.0400227 (or 4%). In other words, an average of 5% of consumer goods firms in Nigeria had top level managers who were also shareholders of the company. This assertion was confirmed by the standard deviation which suggested that the data was distributed around the mean. Also, the minimum and maximum values of 0.01 and 0.168 respectively, implied that just 16% of the companies had managerial shareholders.

In the case of institutional investors, the table showed a mean value of 0.1894311 with 0.073284 as the standard deviation; this means on the average, about 19% of the firms had institutional investors in their ownership composition. However, the value of the standard deviation 7% was an indication that the number had slightly high dispersion in level of institutional ownership among the sampled firms. The table also show that minimum number of institutional ownership is 0.092 (about 9%) while the maximum was 0.392 (or 39.2%).

Correlation Matrix

A correlation matrix shows the relationship between the explanatory and the explained variables and also the relationship among all pairs of explanatory (independent) variables themselves. Generally, high correlation is expected between the explained (dependent) and explanatory variables; while low correlation is expected among pairs of explanatory variables. According to Gujarati (2004), a correlation coefficient between two explanatory variables of 0.80 is considered excessive and thus certain measures are required to correct some anomalies in the data.

Table 3: The Correlation Matrix

Variable	SR	OWNCON	MANOWN	INSCON
STR	1.0000			
OWNCON	0.2344	1.0000		
MANOWN	-0.1972	0.0044	1.0000	
INSCON	0.2695	0.2259	-0.1536	1.0000

Source: Researcher's Extraction from STATA13 Output, 2022.

Table 3 presents the result of the correlation matrix for all the variables, and depicts that ownership-concentration and institutional-ownership as having positive correlation with stock returns while managerial-ownership exhibited negative correlation with a coefficient of -0.1972 with stock returns. This was an indication that this explanatory variable and the explained variable moved in different directions.

Regression Diagnostics

Diagnostic tests that reveal robustness of regression estimation that satisfy assumptions of the Ordinary Least Square (OLS) include multicollinearity and heteroskedasticity tests. Specifically, multicollinearity test is a pre-estimation test that ascertains the health or robustness of time series data used for analysis. Multicollinearity occurs when the explanatory variables are extremely correlated with each other, as opposed to being independent of each other. According to [Hair et al. \(2006\)](#), the presence of high correlations (≥ 0.90) indicates presence of multicollinearity. It is examined using variance inflation factor (VIF), and tolerance ($1/VIF$) values (see Table 4). From the result output, the VIF and $1/VIF$ were found to be consistently smaller than 10 and above 0.10 respectively indicating absence of multicollinearity ([Hair et al., 2006](#)). This is an indication that the explanatory variables were had no multicollinearity, and thus were healthy and reliable to be used for further analyses.

Table 4: Tolerance and Variance Inflation Factors

Variable	VIF	1/VIF
MANOWN	1.46	0.683668
OWNCON	1.10	0.905609
INSCON	1.41	0.711708
Mean	VIF = 1.32	

Source: Stata13 Output, 2022

Heteroskedasticity test

The null hypothesis (H_0) in this test assumes that the variance of the *residuals* is constant, that is: H_0 : Constant variance. The result output showed that $\chi^2(1) = 0.59$, with $\text{Prob} > \chi^2 = 0.0910 > 0.05$.

Breusch-Pagan/Cook-Weisberg test for heteroskedasticity

Ho: Constant variance
Variables: fitted values of SR
Chi2(1) = 0.59
Prob>Chi2 = 0.0910

Since p -value is bigger than the threshold value of 0.05, it implies that null hypothesis had to be rejected, indicating the presence of heteroskedasticity. Next, the Hausman Specification Test was subsequently conducted.

Hausman Specification Test:

The fact remained that our study's data was panel data—with inherent unobservable problems of heterogeneity and endogeneity. Hausman Test was used to check for endogeneity, that is whether a predictor variable was correlated with the error term ([Wooldridge, 2009](#)). Furthermore to this, the test was used to specify which model was most appropriate: random effect model [= null hypothesis (H_0) = preferred model] or fixed effect model [= alternative

hypothesis (Ha)]. The test was to ascertain whether the unique errors (u_i) were correlated with the regressors; the null hypothesis was, they were not, i.e. $H_0 =$ Random Effect; $H_a =$ Fixed Effect.

$$\begin{aligned} \text{Ho: difference in coefficients not systematic} \\ \text{chi2} &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 0.01 \\ \text{Prob>chi2} &= 0.8900 \\ (V_b-V_B \text{ is not positive definite}) \end{aligned}$$

The Hausman Test result showed that the value of chi2 of 0.01 had prob>chi2 = 0.8900 (greater than the 0.05 threshold value), and so insignificant. Hence, the Hausman test was in favour of Random Effect model.

Breusch-Pagan Lagrangian multiplier test for Random effects

Since the Hausman test favoured Random Effect model, and to meet the condition that one or more equations had to be satisfied exactly by the chosen values of the variables, we next conducted the Breusch-Pagan LM test for random effect to choose the more appropriate model from between the random effect result and pooled OLS regression. The result gave a Chi2 of 553.13 with a corresponding Prob>chibar2 = 0.0000, thus indicating that the pooled OLS regression is the appropriate model to be interpreted (see regression output on Table 5)

The regression result in Table 5 revealed R-square value of 0.1854, meaning that the ownership structure variables in the study explained stock returns to the tune of 18.54%. The F-statistic, $F(3, 156) = 54.86$ with $\text{Prob}>F = 0.0029$, indicated that the model was fit. This also means that the ownership structure variables selected for the study were suitable and could be used to explain the overall behaviour of stock returns of consumer goods firms in Nigeria.

Table 5: Summary of pooled OLS Result Regression Result

Source	SS	Df	MS	Number of obs = 160		
Model	948195.669	3	316065.223	F(3, 156)	=	54.86
Residual	10150014.9	156	65064.1982	Prob > F	=	0.0029
Total	11098210.6	159	69800.0666	R-squared	=	0.1854
				Adj R-squared	=	0.1678
				Root MSE	=	255.08
STR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
OWNCON	4.282942	1.112055	3.85	0.000	2.103354	6.46253
MANOWN	-36.9705	20.69375	-1.79	0.076	-77.8466	3.905607
INSTCON	964.9211	295.6347	3.26	0.001	380.9575	1548.885
_CONS	.0034803	.0055717	0.62	0.534	-0.0076015	.0145622

Source: Computed (2022) using STATA 13.0 from Annual Reports/Accounts of the sampled firms (2011-2020)

Stock Return model

From the specified model (i) stated earlier, the identified parameters of: $b_0 \equiv \text{CONS} = .0034803$; $\beta_1 = \text{coef. of OWNCON} = 4.282942$; $\beta_2 = \text{coef. of MANOWN} = -36.9705$; and $\beta_3 = \text{coef. of INSTCON} = 964.9211$. Therefore, the Stock Return model for consumer goods for any firm, in any year would be:

$$\text{STR}_{it} = 0.0034803 + 4.282942 * \text{OWNCON}_{it} - 36.9705 * \text{MANOWN}_{it} + 964.9211 * \text{INSTCON}_{it}$$

Test of Hypotheses

H₀1: Ownership Concentration versus Stock Returns:

The regression result in Table 5 the variable OWNCON having a coefficient $\beta = +4.282942$, t-value = 3.85 and p -value = 0.0000. Since p -value = 0.0000 < 0.05, the null hypothesis was rejected. By interpretation, it means ownership concentration had a positive and significant effect on stock returns of listed consumer goods companies in Nigeria. This finding had a statistical subset of the finding obtained by [Afriyani \(2018\)](#), that indicated a significant positive effect of managerial stock ownership structure on stock performance.

H₀2: Managerial Ownership versus Stock Returns:

The regression result in the table indicates that MANOWN has $\beta = -36.9705$, t-value = -1.79 and p -value = 0.076. Since the p -value = 0.076 > 0.05, the study failed to reject the null hypothesis, implying insignificant result—that is the managerial-ownership variable had an insignificant and negative effect on stock returns of listed consumer goods firms in Nigeria.

H₀3: Institutional Concentration versus Stock Returns:

From the regression output, coefficient for INSTCON, $\beta = +964.9211$, t-value = 3.26 and p -value = 0.001. Since the p -value = 0.001 < 0.05, shows that the result was significant; that is, Institutional Ownership had a statistically significant and positive result. Based on this, the study rejected the null hypothesis and accepted that, Institutional concentration had a significant effect on stock returns of listed consumer goods firms in Nigeria. This indicated a strong likelihood that institutional owners could be used to determine the level of stock returns of investors in the consumer goods sector. This finding is statistically in agreement with the study of [Rostami et al. \(2016\)](#) that found a significant positive relationship between institutional ownership, among other variables and stock returns of companies listed in Tehran stock exchange.

Conclusion

Ownership structure and its effect on stock returns has extant study carried severally. However, in this study attempt was made to examine the effect of three ownership attributes (of Ownership Concentration, Managerial Ownership and Institutional Ownership) on stock returns of quoted consumer goods firms in Nigeria. Based on the result obtained, the study concluded based on aggregated ownership attributes had a combined significant influence (though weak) on stock returns of quoted consumer goods firms in *NGX*. On specific variable basis, conclusion was that managerial ownership had no substantial influence on stock returns, and so the study lacked substantial statistical evidence, and so managerial ownership

did not reveal itself as a determinant of stock returns. However, ownership-concentration and institutional-ownership exerted substantial influence on stock returns; and hence these attributes favourably constituted determinants of stock returns among consumer goods companies quoted on the Nigerian Exchange Group.

Recommendations

Based on the findings and conclusion, the study recommended that consumer goods companies should encourage higher institutional shareholding, since this had a favourable effect on stock returns, as the higher the institutional ownership, the stronger the external control of the company, and the better the encouragement on managers to increase dividend payments. This is in agreement with the theory that a company desirous of improving its return on assets and dividend payment can encourage having more block holders, since large block holders have greater incentive to monitor management; moreover, the costs involved in monitoring is less than the benefits to large equity holdings in the firm. This will go a long way in creating additional wealth that can be made available for distribution as dividends and reinvestment in the company.

References

- Afriyani, J. (2018). The effect of managerial ownership, institutional and investment opportunities on stock performance in manufacturing companies that are listed on the Idx, *International Journal of Scientific and Technology Research*, 7(12), December 2018ISSN 2277-8616.
- Akwe, J., Garba, I., & Dang, G. H., (2018). Effects of firm level attributes on stock returns in Nigeria, *Doctor of Philosophy Dissertation*, University of Dhaka.
- Almazan, H. Hartzell, J. C. & Starks L. T. (2005). Institutional investors and executive compensation, *Journal of Finance*, 58, 2351-2374.
- Amal, S. A., (2014). Effect of institutional ownership and ownership concentration on firm stock returns and financial performance of the listed companies in the Egyptian stock exchange, *European Journal of Economics*, 15 (3), 16-61.
- Arora, A. & Sharma, C. (2016). Corporate governance and firm performance in developing countries: Evidence from India, *Emerald Group Publishing Limited*, 16(2), 420-436, DOI 10.1108/CG-01-2016-0018
- Bala, H., & Idris, I. (2015). Firm's specific characteristics and stock market returns (evidence from listed food and beverages firms in Nigeria), *Research Journal of Finance and Accounting*, 6(16), 188-200.
- Bange, S., & De-Bondt, R. (1998). Ownership prevents managers to opportunistically engage in earnings management, *European Accounting Review*, 14(1), 155-180.

- Bawa, M. L., & Isah, H. M. (2014). Ownership structure and informativeness of accounting earnings of listed deposit money banks in Nigeria, *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 5(7), 73-82.
- Berle, A. & Means, G. (1932). *The modern corporation and private property*, 2(3), 45-53. Macmillan. New York Times,
- Bushee, B. (1998). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research*, 18(2), 207-246.
- Chung, R., Firth, M., & Kim, J. (2002). Institutional monitoring and opportunistic earnings management, *Journal of Corporate Finance*, 8(1), 29-48. [https://doi.org/10.1016/S0929-1199\(01\)00039-6](https://doi.org/10.1016/S0929-1199(01)00039-6)
- Claessens, S. & Fan, J. P. (2002). Corporate governance in Asia: A survey, *International Review of Finance*, 3(2), 71-103.
- Claessens, S., & Djankov, S. (1998). Ownership concentration and corporate performance in the czech republic, *Journal of Comparative Economics*, 27, 498-513.
- Cornett, M., Marcus, A. & Tehranian, H. (2008). Corporate governance and pay-for performance: The impact of earnings management, *Journal of Financial Economics*, 87(1), 357-373.
- Demsetz, T. & Lehn, L. (1985). The stakeholder theory of the corporation: concepts, evidence, and implications, *Academy Management Review*, 20(1), 65-91.
- Ebrahim, A. (2007). *Auditing quality, auditor tenure, client importance, and earnings management: An additional evidence*, Unpublished, Rutgers University.
- El-Ghouty, A. S. & El-Masry, A. A. (2017). Effect of ownership structure on firm stock return performance: Evidence from the Egyptian stock market, *International Research Journal of Finance and Economics*, ISSN 1450-2887, 160.
- Fernandes, N. & Ferreira, M. E. (2009). *Does financial experience help banks during credit crises?*,
- Gordon, M. J. (1962). *The investment, financing, and valuation of the corporation* homewood, Illinois: Irwin Publishers.
- Gordon, M. J. (1963). Optimal investment and financing policy, *The Journal of Finance*, 18(2), 264-272.
- Gujarati, D. N. (2004). *Basic econometrics. 4th ed.*, McGraw-Hill Companies

- Gul, A. B., Malmendier, U. & Tate, G. (2010). Financial expertise of directors, *Journal of Financial Economics*, 88, 323-354.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis (6th ed.)*, Upper Saddle River, NJ: Pearson Prentice Hall.
- Hausman, J. A. (1978). Specification tests in econometrics, *Econometrica*, 46, 1251-1272.
- He, A. J., & Shen, T., (2014). Boards of directors and firm performance: Integrating agency and resource dependence perspectives, *Academy of Management Review*, 28(3), 383-396.
- He, U., Hermalin, B. E. & Weisbach, M. S. (2013). Board of directors as an endogenously determined institution: A survey of the economic literature, *Economic Policy Review*, 9 (1), 7-26.
- Healy, P. (1985). The impact of bonus schemes on the selection of accounting principles, *Journal of Accounting and Economics*, 7, 85-107.
- Houlthausen, M. O. (1995). Low equity ownership manages earnings for better compensation and avoids debt covenants, *European Journal of Business and Innovation Research*, 5(1), 1-15.
- Iqbal, M. J., Siddiq, A. & Gul, H. (2016). Institutional ownership and discretionary accruals: Empirical evidences from Pakistani listed non-financial companies, *Journal of Information Management and Business Review*, 4(4), 217-222.
- Jensen, M. (1986). Agency costs of free cash flows, corporate finance and takeovers, *American Economic Review*, 26, 323.
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure, *Journal of Financial Economics*, 3, 305-360.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance and takeovers. *Journal of American Economic Review*, 76, 323-329.
- Jiang, L. & Kim, J. B. (2004). Foreign equity ownership and information asymmetry: evidence from Japan, *Journal of International Financial Management & Accounting*, 15(3), 185-211. <https://doi.org/10.1111/j.1467-646X.2004.00107.x>
- Jung, K., & Kwon, S. Y. (2002). Ownership structure and earnings informativeness evidence from Korea, *The International Journal of Accounting*, 301-325.

- Khan, S., Kamal, Y., Khan, A., Hussain, A., Rafiq, M., Bibi, M., Shah, S. F. A., Shah, Z. & Khan, M. (2020). The impact of ownership types on the value of discretionary accruals: What is the role of audit committee? evidence from Pakistan, *International Journal of Economics and Financial Issues*, 2020, 10(4), 141-150. ISSN: 2146-4138 available at <http://www.econjournals.com>
- Kang, I. & Stulz, N. (1997). The association between corporate boards, audit committees, and management earnings forecasts: an empirical analysis, *Journal of Accounting Research*, 43(3), 453–486.
- Klassen, R. D., (1997). 'The impact of environmental management on firm performance, *Management Science* 42 (8), 1199–214.
- Koh, P. S. (2003). *On the association between institutional ownership and aggressive corporate*, 5(2)
- Lin, W., & Zhang, R. (2011). Corporate social responsibility, ownership structure, and political interference: Evidence from China, *Journal of Business Ethics*, 96(4), 631-645.
- Lintner, J. (1962). Dividends, earnings, leverage, stock prices and the supply of capital corporations, *Review of Economics and Statistics*, 44 (3), 243-269.
- Lola-Ebueku, I. O. (2016). Does dividend policy affect firm earnings? Empirical Evidence from Nigeria, *International Journal of Financial Research*, 7(1).
- Markowitz, H. (1952). Portfolio selection, *The Journal of Finance*, 7(1), 77-91
- Mitton, T. (2004). Corporate governance and dividend policy in emerging markets, *Emerging Markets Review*, 5, 409-426.
- Murekefu, T. & Ouma, O. (2012). The relationship between dividend payout and firm Performance. A study of listed companies in Kenya, *European Scientific Journal*, 8 (9), 1857-7881
- Navissi, F., & Naiker, V. (2006). Institutional ownership and corporate value, *Managerial Finance*, 32(3), 247–256. <https://doi.org/10.1108/03074350610646753>
- Nazir, N. & Malhotra, A. K. (2016). The effect of ownership structure on firm profitability in India: A panel data approach, *International Journal of Economics and Finance*; 8(6), ISSN 1916-971X E-ISSN 1916-9728
- Olowoniyi, A. O. & Ojenike, J. (2012). Determinants of stock return of Nigerian listed firms, *Journal of Emerging Trends in Economics and Management Sciences* 3 (4), 389-392.

- Potter, G. (1992). Accounting earnings announcements, institutional investor concentration, and common stock returns, *Journal of Accounting Research*, 146–155.
- Pound, J. (1988). The promise of the governed corporation, *Harvard Business Review* 73.
- Ramsay I. &, Blair M. (1993). Ownership concentration, institutional investment and corporate governance: An empirical investigation of 100 Australian companies, *Melbourne University Law Rev.*, (19),153-194.
- Rostami, M., Rostami, M., & Kohansa, S. (2016). The effect of corporate governance components on return on assets and stock return of companies listed in Tehran stock exchange, *African Journal of Business Management*, 6(12), 4603-4611.
- Rubin, A. & Smith, D. (2009). Institutional ownership, volatility and dividends, *Journal of Banking and Finance*, 33, 627-63
- Ruiz-Mallorquí, M. V. & Santana-Martín, D. J. (2011). Dominant institutional owners and firm value, *Journal of Banking & Finance*, 35(1), 118–129.
<https://doi.org/10.1016/j.jbankfin.2010.07.020>
- Shahid, M. S., Gul, F., Rizwan, M. & Bucha, M. H. (2016). Ownership structure, board size, board composition and dividend policy: new evidence from two emerging markets, *Journal of Business Studies-JBS*, 12(2).
- Shleifer, A., & Vishny, R., (1997). A survey of corporate governance, *Journal of Finance*. 52, 737–775.
- Sias, R. W. (2004). Institutional herding, *Review of Financial Studies*, 17, 165-206.
- Soeharto, S. M., Violita, M. (2019). Stock liquidity and stock return. *Ekspektra: Jurnal Bisnis dan Manajemen*, 3(2). DOI: <http://dx.doi.org/10.25139/ekt.v3i2.2047>
- Stiglitz, J. E. (1985). Credit rationing in markets with imperfect information, *American Economic Review* 77:1 (March),228-31.
- Sundaramurthy, S., Rhoades, F., & Rechner, K. L. (2005). A meta-analysis of board leadership structure and financial performance: Are “Two Heads Better than One”?, *Corporate Governance: An International Review*, (9)4, 311–319.
- Thomsen, S. & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies, *Strategic Management Journal*, 21(6), 689-705.
- Uddin, M. N., Mohammed, S. U., Khan, M. S. U. & Mosharrof, H. M. (2019). Does corporate governance influence leverage structure in Bangladesh? *International Journal of Financial Studies*, 7(50). doi:10.3390/ijfs7030050

- Umar, T. L., & Musa, D. J. (2007). *Strategic management and business policy* (13 ed.), Pearson.
- Uwubanmwun, A. E., & Obayagbona, J., (2012). Company fundamentals and returns in the Nigerian stock market, *Journal of Research in National Development* 10(2).
- Wafa, M. A. & Younes, B. (2014). The relationship between ownership structure and earnings quality in the French context, *International Journal of Accounting and Economics Studies*, 2(2), 80-87.
- Warfield, T., Wild, J. & Wild, K. (1995). Managerial ownership, accounting choices and informativeness of earnings, *Journal of Accounting and Economics*, 20, 61–91
- Wei, Z., Xie, F. & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms: 1991–2001, *Journal of Financial and Quantitative Analysis*, 40(1), 87-108. <https://doi.org/10.1017/S0022109000001757>
- Wooldridge, J. M. (2009). *Introductory econometrics: A modern approach*, 4th edn., Australia: South-Western 88. ISBN 978-0-324-66054-8