

Impact of firm attributes on share prices of listed industrial goods companies in Nigeria

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Abstract

This study examined the impact of firm attributes on share prices of listed industrial goods companies in Nigeria. The study used descriptive and explanatory research designs, utilizing secondary data from the annual reports and accounts of listed industrial goods companies in Nigeria for a period of ten years (2007 - 2016). The data are analyzed using descriptive statistics, correlation and regression (OLS and GLS) analysis. The study found that profitability, board size and board gender have significant positive impact on share prices of listed industrial goods companies in Nigeria. Managerial and institutional share ownership however, have significant negative impact on share prices of listed industrial goods companies in Nigeria. It is therefore concluded that listed industrial goods companies with high profits and large board sizes that are highly gender diverse tend to have higher share prices than their counterparts. The study recommended among others, that users of accounting information should be objective in assessing firm profitability in order to make wise investment decisions. The shareholders of listed industrial goods companies in Nigeria should increase their Board size and female gender representation as this has a lot of benefits attached to it which can enhance their share prices.

Keywords: Firm attributes, share prices, firm value

JEL Classification: M49

1. Introduction

The concept of firm value has been the primary concern of business practitioners in all types of organizations, largely due to the implications it has on organization's health and ultimately its survival. Firm value is the present value of the firm's current and future profits (Baye, 2010). Though a high firm value reflects management's effectiveness and efficiency in making use of company's resources, firm attributes are among other important factors that could affect the value of the firms. It is important to identify these factors since the maximization of social welfare in an economy is dependent upon the maximization of total firm value of all the firms in the economy (Jensen, 2000).

Firm attributes are those distinctive features peculiar to companies by which they can be identified and can be viewed from different perspectives: performance attributes, company structure attributes, board structure attributes, audit committee attributes and ownership structure attributes among others. Performance attributes are those attributes that differ by time

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and allow identifying a firm's performance, while company structure attributes are those attributes that are widely known and considered stable over time (Naser, Al-Khatib & Karbhari, 2002). The board of directors plays a significant role as an internal mechanism and is used to reduce agency costs (Paul, Friday & Godwin, 2011). Similarly, the audit committee is an important monitoring mechanism that is required to hold regular meetings with the external auditor to review the financial reporting system and internal auditing system which leads to a decrease in agency costs and information asymmetry (El-Faitouri, 2012). Ownership structure on the other hand, helps align the interests of individuals, corporations and society through a fundamental ethical basis and fulfills the long-term strategic goal of the owners, building shareholder value and establishing a dominant market share.

There are a number of notable contributions on firm attributes and value in developed, as well as developing countries, and these include that of Chen and Chen (2011), in Taiwan, Rajhans and Kaur (2013), in India, Hermuningsih (2013), in Indonesia, Granath and Thorsell (2014), in USA, Abdallah (2014), in Saudi Arabia, Kumar (2015), in U.A.E, and Abdullahi (2016), in Nigeria among others.

Most of these studies used limited number of firm attributes. The current study employs data comprising ten different firm attributes, so as to have a robust result. It is therefore distinguished by the large variables that are considered. Similarly, this study employs recent data (2007 to 2016) in order to provide current evidence from the listed industrial goods companies in Nigeria.

Similarly, the study at hand, uses the Wald (F) test to see if time effects are needed when running a fixed effect model, which is a unique test and has not been used so far in studies on firm attributes and value based on the literature review, even when fixed effect regressions are adopted.

The empirical studies on firm attributes and value in Nigeria dwell on a sample of firms listed in the NSE, other sectors of the NSE, or a sub-sector of the industrial goods sector and none of the studies covers the whole listed industrial goods companies in Nigeria, notwithstanding the importance of the sector to the country's economic development. This study, therefore seeks to complement the existing literature on the subject matter by using the listed industrial goods companies in Nigeria. Overall, the findings regarding the impact of firm attributes on value have generated varied results ranging from those supporting a positive impact (e.g. Granath & Thorsell, 2014), to those opposing it (e.g. Ahern & Dittmar, 2011). Others however report mixed results (e.g. Kumar, 2015). One apparent conclusion is that, there is no common agreement on the impact of firm attributes on value. Hence, the results are inconclusive and require more empirical work especially in the Nigerian industrial goods sector where to the best of the researcher's knowledge none exists. The Nigerian industrial goods sector is dominated by the production of goods for commercial purposes (Nigerian Stock Exchange, NSE, 2016). The sector witnesses impressive performance in 2013 as a result of improvement in the demand for output, increase in export and government policies (Sola, Obamuyi, Adekunjo & Obamuyi, 2013). Presently, it is the second highest contributor to the NSE market capitalization (NSE, 2018).

In the light of the above, this study aims to examine the impact of firm attributes on share prices

of listed industrial goods companies in Nigeria. To achieve this aim, the study comes up with the following hypothesis: firm attributes have no significant impact on share prices of listed industrial goods companies in Nigeria. The study examines the impact of ten firm attributes (profitability, growth, leverage, firm size, board size, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership) on share prices of listed industrial goods companies in Nigeria for a period of ten years (2007 to 2016). This study is significant because to the best of this Researcher's knowledge, there exist no research, before now, that examines the impact of firm attributes on share prices of listed industrial goods companies in Nigeria. Thus, the study contributes to empirical evidence in the area.

The paper is thus organized into five sections. Section two, which is the next section, reviews related literature on the subject matter of the study; section three discusses the methodology of the study, while section four presents the results and discussions. Finally, section five presents conclusions and recommendations.

2. Literature Review

2.1. Firm Attributes and Value

The impact of firm attributes on value is a central issue to the corporate organizations and researchers. There are a number of studies conducted on firm attributes and value at different times in developed, as well as, developing countries, and most of which are well documented in the area of accounting and finance. For example, in USA, Granath and Thorsell (2014), look at the factors that affect a firm's capital structure decision and how the capital structure affects a firm's shareholder value. By using a dataset consisting of 502 large US firms during the years 2005 to 2014 and generalized least square (GLS) regression, the study finds that a firm's leverage has a positive effect on shareholder value.

Apergis and Sorros (2011), on the other hand, investigate the impact of long-term debt on the value of the firm for international listed manufacturing firms using OLS regression. The testing period is based on quarterly data from 1999 to 2009, while 346 internationally listed firms are employed derived from five international stock exchanges, i.e. the NYSE, London, Frankfurt, Hong Kong and Tokyo. The empirical findings show that long-term leverage obligations have a significant negative impact on the value of the firm. The impact, however, is differentiated with respect to the size of the firm as well as with the type of long-term investment the long-term debt is spent.

In Taiwan, Chen and Chen (2011), focus on the relationship between profitability and firm value with capital structure as mediator and firm size and industry as moderators for 647 listed companies for the years 2005 to 2009. Using correlation and regression analysis, the results confirmed that profitability has a positive effect on firm value and a negative effect on leverage, while the leverage has a negative effect on value, and profitability has a significant mediating effect. In Norway, Ahern and Dittmar (2011), establish an evidence on the relationship between firm value and mandatory female board representation for 248 publicly listed firms for the period 2001 to 2009. The OLS regression result shows a significant drop in the stock price at the announcement of the law and a significant large decline in Tobin's Q.

In India, Rajhans and Kaur (2013), investigate the determinants of firm value creation for 16

companies listed on Bombay Stock Exchange (BSE) from 2002 to 2011. OLS and GLS regressions are used for statistical analysis of data. The study finds that profit among others, has a significant positive effect on value of a firm. The study also provides evidence that sales, fixed assets and weighted average cost of capital (WACC) affect value of a firm significantly, while debt-to-equity ratio has insignificant negative impact on value of a firm. Haldar, Shah and Rao (2014), however, examine the relationship between board diversity and firm value for 500 large listed Indian firms for the period 2003 to 2013. Using regression analysis, the result provides evidence that there is a significant positive relationship between board diversity and firm value for the listed Indian firms.

In Indonesia, on the other hand, Hermuningsih (2013), examines the influence of profitability, growth opportunity and capital structure on firm value for 150 companies listed on the Indonesia Stock Exchange (ISE) for the period 2006 to 2010. Using Structural Equation Model (SEM), result shows that profitability, growth opportunity and capital structure positively and significantly affect the company's value. Siahaan, Suhadak, Handayani and Solimun (2014), conduct a study using Generalized Structured Component Analysis (GSCA) for manufacturing companies listed in ISE during the period 2010 to 2012 and reveal among others, that size has insignificant relationship with firm value, although positive for large assets cluster companies and negative for small assets cluster companies. Capital structure on the other hand, has insignificant positive relationship with firm value for the large assets cluster companies and significant negative relationship with firm value for the small assets cluster companies.

In a related development, Lestari and Armayah (2016), study the effect of profitability on company value for 10 manufacturing companies listed in ISE for the period 2009 to 2014. Empirical results from OLS regression analysis show that profitability variability explains change in company value. Return on Investment and Return on Equity have significant positive effect on company value, while Net Profit Margin has significant negative effect on company value.

In Sri Lanka, Velnampy (2013), examines the effect of corporate governance on firm performance for a sample of 28 manufacturing companies for the period 2007 to 2011. The outcome from the regression analysis shows that board size is insignificantly related to firm performance. Board committees however, have insignificant negative relationship with ROE and insignificant positive relationship with ROA.

In UAE, Kumar (2015), examines the determinants of value creation based on a sample of 61 listed companies for the period 2011 to 2012. Using OLS regression, the results show that higher earnings relative to price signify higher value creation. Size in terms of total assets of a firm however, is inversely related to value creation, while size measured by the natural logarithm of market equity (market capitalization) is positively related to value creation. In Saudi Arabia, Abdallah (2014), studies the impact of financial structure, financial leverage and profitability on share value of industrial companies for the period 2009 to 2012 using OLS regression and concludes that there is significant positive relationship between return on equity and stock market price. Similarly, there is significant positive relationship between capital structure and stock market price. However, it is discovered that, there is an insignificant negative relationship between financial leverage and stock value.

In Iran, Khodamipour, Golestani and Khorram (2013), study the relationship between liquidity

and size of the company with the value of the company in 100 companies listed on the Tehran stock exchange (TSE) for the period 2007 to 2011. The results using GLS regression indicate that there is an insignificant positive relationship between size of the company and stock return and between the size of the company and value of the company.

In Kenya, Kaguri (2013), examines the relationship between firm characteristics and financial performance of life insurance companies. In order to carry out the study, secondary data of 17 life insurance companies over the period of 2008 to 2012 was obtained from the annual reports and audited financial statements. OLS regression is used to analyze the data. The study findings indicate that size among others has a significant positive relationship with financial performance, while leverage has significant negative relationship with financial performance of life insurance companies in Kenya.

In Nigeria, Muhammad (2009), examines the impact of managerial ownership and board characteristics on the value of listed oil marketing companies in Nigeria for the period 1999 to 2008. Using GLS regression and system GMM, the study finds among other things that board size has a significant negative impact on value, while managerial ownership has significant positive impact on value. A similar study conducted by Okougbo (2011), investigates the relationship between corporate governance and firm performance of fifty two (52) non-financial firms listed on the NSE for the period 2003 to 2008. The result of the GLS regression reveals that audit committee independence has a significant negative relationship with return on equity and profit margin.

Adedoyin (2011), on his part assesses the effect of corporate firm characteristics in determining share prices of listed firms on the NSE. A panel data design is adopted using seventy-two companies for the period 2004 to 2009. Using OLS and GLS regressions, the result indicates that profitability has insignificant positive relationship with share price in both models, while growth has insignificant relationship with share price but positive in the first model and negative in the second model. Size however, has significant positive relationship with share prices.

Furthermore, Aanu, Odianonsen and Foyeke (2014), explore the influence of audit committee effectiveness on the performance of 25 manufacturing firms listed on the NSE for the period 2004 to 2011. The result of the regression analysis shows a significant positive relationship between independence of the audit committee and ROA, ROE and ROCE. However, the meetings of audit committee shows insignificant positive relationship with all performance variables. On the other hand, Akpan and Amran (2014), examine the relationship between board characteristics and company performance for a sample of 90 firms from the NSE from 2010 to 2012. The study uses OLS regression for analysis of data and provides evidence that board size has significant positive relationship with company performance, while board women have significant negative relationship.

Saifullahi, Mohammed and Hassan (2015), in their study, investigate the impact of shareholding structure on the performance of 6 listed conglomerate firms in Nigeria for the period 2008 to 2013. OLS and GLS regression techniques are used for data analysis. The study finds that managerial ownership and independent director's ownership have a significant negative impact on the performance of listed conglomerate firms in Nigeria. On his part, Akpan (2015), examines the relationship between audit committee meetings, board size, gender, age, equity and company performance using a sample from 79 companies listed on the NSE from 2010 to

2012. The result of the OLS regression analysis shows that board size and directors' equity have significant negative relationship with ROE. Gender diversity, however, has insignificant positive relationship with ROE, while audit committee meetings have significant positive relationship with ROE.

In a related development, Abdullahi (2016), investigates the impact of firm characteristics and governance mechanisms on financial performance of listed building materials firms for the period 2005 to 2014. The study uses GLS regression to analyze the data extracted from the annual reports and accounts of the seven sampled firms. The study finds that leverage and firm size have significant negative impact on the financial performance of building materials firms in Nigeria. It is also discovered that managerial shareholdings have insignificant positive effect on the financial performance of listed building materials firms in Nigeria.

From the foregoing review, it is evident that these studies have made significant contributions in this area, but with few limitations. Most of these studies use OLS regressions and limited time frames. Longer time frames and more robust panel data methodology, may allow the researchers to establish more robust relationships. Similarly, most of the studies focused on a limited number of firm attributes despite the enormous firm attributes that are available. The use of accounting-based measures of performance, without any market-based measures also constitutes a major drawback.

It could be seen further from the foregoing that the findings regarding the impact of firm attributes on value have generated varied results ranging from those supporting a positive view, to those opposing it. Hence, the results are inconclusive and require more empirical work especially in the Nigerian industrial goods sector where to the best of the researcher's knowledge none exists.

2.2. Theoretical Framework

In examining the impact of firm attributes on value of listed industrial goods companies in Nigeria, three theories are seen to be relevant. These are the agency, resource dependence and signaling theories. The agency theory, which is based on the conflict of interest between managers (agents) and owners (principals), is developed by Jensen and Meckling (1976), who believe that both managers and shareholders are utility maximizers and act accordingly, meaning that if their interests are not aligned, then a principal-agent problem arises which can affect firm value.

Agency costs are defined as the costs of structuring, monitoring and bonding a set of contracts among agents with conflicting interests (Fama & Jensen, 1983). Consequently, lower agency costs are associated with better performances and thus higher firm values (Kaguri, 2013). Agency theory is used in this paper to explain the impact of leverage, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership on share prices of listed industrial goods companies in Nigeria.

The second is the resource dependence theory, which explains that organizations depend on resources from external sources which affect its structures in terms of the strategic management of external relations alongside enforcing control over such organizations (Okougbo, 2011). The theory is used in this paper to explain the impact of firm size and board size on share prices of

listed industrial goods companies in Nigeria.

The third is the signaling theory, which was developed by Akerlof (1970). This theory explains how success or failure signals from management (agent) should be delivered to owner (principal). Signaling theory explains firm's incentive to voluntarily report information to capital markets even though there is no mandate from regulatory agencies. Financial information submitted aims to reduce information asymmetry between firms and external parties (Wolk, Tearney & Dodd, 2001). The theory is used in this paper to explain the impact of profitability and growth on share prices of listed industrial goods companies in Nigeria. Considering the aim of the study, all the three theories are important in explaining this study.

3. Methodology

The study uses descriptive and explanatory research designs. Data for the study is obtained from the annual reports and accounts of listed industrial goods companies in Nigeria for the period 2007 to 2016 and the NSE daily price list for the period. The designs are believed to be appropriate for the examination of the impact of firm attributes on value of listed industrial goods companies in Nigeria. The population of the study is the seventeen (17) industrial goods companies that are quoted on the NSE as at 31st December 2016. However, the study uses a two-point filter to arrive at the working population of the study, which is in line with Garko (2015). These filters are: i) a company must be listed for the entire period of the study, and ii) a company must have the required data for the study. Thus, five companies are removed because they are quoted after 2007. Similarly, African Paints Nigeria Plc. is also removed because it does not have the required data for the study. Consequently, the application of these filters results in the emergence of eleven (11) companies as the working population of the study. These are: Ashaka Cement Plc., Avon Crown caps & Containers Plc., Berger Paints Plc., Beta Glass Co. Plc., Chemical and Allied Products Plc., Cement Company of Northern Nigeria Plc., DN Meyer Plc., First Aluminium Nigeria Plc., Greif Nigeria Plc., Lafarge Wapco Plc. and Premier Paints Plc.

In view of the small size of the population and the availability of data for all the firms, the study adopts census sampling technique by studying all the firms in the working population. This sampling technique has also been used by previous studies such as Abdullahi (2016). The source of data for this study is secondary in nature, generated from the annual reports and accounts of the eleven (11) sampled listed industrial goods companies in Nigeria and the NSE daily price list for the period of the study. This study uses two sets of variables; the dependent and the independent variables. The dependent variable is the share price of listed industrial goods companies in Nigeria proxied by market price per share. Specifically, the average of the highest and lowest share prices for each year is used, as used by Muhammad (2009).

Similarly, the study uses a number of firm attributes as the independent variables. The measurement of the firm attributes is explained in the table below.

Table 1: Independent Variables and their Measurement

S/No.	Variables.	Measurement.
1	Profitability	Return on assets (ROA), i.e. profit after tax divided by total asset, as used by Kumar (2015).
2	Firm Growth	Sales growth rate, i.e. the percentage increase or decrease in sales of the company between two years, as used by Abba and Usman (2016).
3	Leverage	Debt-to-total assets ratio, i.e. the total debt divided by the total assets of the firm, as used by Abdallah (2014).
4	Firm Size	Logarithm of total assets, as used by Adedoyin (2011).
5	Board Size	Total number of directors on the board, i.e. non-executive directors plus executive directors (El-Faitouri, 2012).
6	Board Gender	Proportion of female directors on the board to the total number of directors on the board (Akpan, 2015).
7	Audit Committee Composition	This is the proportion of non-executive directors to the total audit committee members (Garko, 2015).
8	Audit Committee Meeting	This is the number of meetings held by the committee within a year (Akpan, 2015).
9	Managerial share ownership	Number of shares by directors on the board to the total number of outstanding shares (Akpan, 2015).
10	Institutional Share Ownership	This is the proportion of shares held by institutional investors to the total ordinary shares issued by the company (Thanatawee, 2014).

Source: Generated by the Author.

Three techniques of data analysis are used to analyze the data generated for the study. These are descriptive statistics, Pearson correlation and multiple regression. This is in line with Khodamipour et al. (2013), and Abdullahi (2016), among others. The STATA software version 13.00 is used for this purpose. The following regression model is used:

$$MPS_{it} = f(\text{PROF, GRO, LEV, FS, BS, BG, ACC, ACM, MSO, ISO}) \dots\dots\dots (1)$$

$$MPS_{it} = \beta_{0it} + \beta_{1it}PROF_{it} + \beta_{2it}GRO_{it} + \beta_{3it}LEV_{it} + \beta_{4it}FS_{it} + \beta_{5it}BS_{it} + \beta_{6it}BG_{it} + \beta_{7it}ACC_{it} + \beta_{8it}ACM_{it} + \beta_{9it}MSO_{it} + \beta_{10it}ISO_{it} + e_{it} \dots\dots\dots (2)$$

Where:

MPS_{it} = Market price per share for Company i in Period t .

$PROF_{it}$ = Profitability for Company i in Period t .

GRO_{it} = Firm Growth for Company i in Period t .

LEV_{it} = Leverage for Company i in Period t .

FS_{it} = Firm Size for Company i in Period t .

BS_{it} = Board Size for Company i in Period t .

BG_{it} = Board Gender for Company i in Period t .

ACC_{it} = Audit Committee Composition for Company i in Period t .

ACM_{it} = Audit Committee Meeting for Company i in Period t .

MSO_{it} = Managerial Share Ownership for Company i in Period t .

ISO_{it} = Institutional Share Ownership for Company i in Period t .

β_{0it} = Intercept

$\beta_{1it} - \beta_{10it}$ = Regression Model Coefficients of the Independent Variables for Company i in Period t .

e_{it} = is the Random Error for Company i in Period t .

To ensure reliability and validity of the regression model, robustness tests are carried out, which include: multicollinearity, heteroskedasticity, normality, linearity, Wald (F) and Breusch and Pagan Lagrangian multiplier tests.

4. Discussion of Results

This section presents the descriptive statistics, correlation and regression results of the dependent and independent variables of the study.

4.1. Descriptive Statistics

This sub section provides a summary statistics of the data generated on the variables of the study. These include measures of central tendency and measures of dispersion of all the variables of the study.

Table 2: Descriptive Statistics of the Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
MPS	110	17.691	19.665	0.5	101.615
PROF	110	0.063	0.142	-0.518	0.540
GROWTH	110	0.078	0.177	-0.375	0.918
LEV	110	0.168	0.151	0.001	0.640
FS (Assets)	110	2.80e+07	7.21e+07	163651	5.02e+08
BS	110	9	3	4	17
BG	110	0.071	0.094	0	0.333
ACC	110	0.449	0.105	0	0.6
ACM	110	3	1	2	7
MSO	110	0.066	0.158	0	0.733
ISO	110	0.418	0.250	0	0.812

Source: Stata output 13.0 based on data collected (2017).

Table 2 provides the mean, standard deviation as well as minimum and maximum of values for the dependent variable (market price per share) and independent variables (profitability, growth, leverage, firm size, board size, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership) of the study.

4.2. Correlation Matrix

The result of the Pearson correlation of the dependent (share price) and independent variables (profitability, growth, leverage, firm size, board size, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership) is presented in Table 3. The correlation measures the strength and direction of association between the variables of the study.

Table 3: Correlation Matrix of the Dependent and Independent Variables

	MPS	PROF	GROWTH	LEV	FS	BS	BG	ACC	ACM	MSO	ISO	VIF
MPS	1.000											
PROF	0.431	1.000										2.75
GROWTH	0.242	0.217	1.000									1.18
	-											
LEV	0.138	-0.402	-0.005	1.000								1.52
				-								
FS	0.487	0.331	0.256	0.230	1.000							3.31
BS	0.494	-0.010	0.205	0.129	0.625	1.000						3.47
				-								
BG	0.450	0.504	0.115	0.032	0.218	0.101	1.000					1.66
ACC	0.230	0.368	0.101	0.049	0.026	0.270	0.171	1.000				1.96
ACM	0.159	0.212	-0.054	0.020	0.307	0.191	0.217	0.148	1.000			1.42
	-				-	-	-	-	-			
MSO	0.206	-0.243	0.036	0.016	0.228	0.134	0.096	0.257	0.419	1.000		1.76
	-					-				-		
ISO	0.179	0.101	-0.024	0.024	0.017	0.166	0.035	0.074	0.083	0.363	1.000	1.56

Source: STATA Output 13.0 based on data collected (2017).

Table 4.2 presents correlation coefficients of the dependent (share price) and independent variables, as well as the independent variables among themselves. The value of the coefficient ranges from -1 to 1. The sign of the correlation coefficient indicates the direction of the association (positive, zero or negative), while the absolute value of the correlation coefficient indicates its strength. This strength ranges from the strong to the moderate to the weak and the very weak or no association at all. Larger values indicate stronger associations. The correlation coefficients on the main diagonal are 1.0, because each variable has a perfect positive linear association with itself.

It is clear from table 4.2 that the independent variables have very weak, weak or moderate (positive and negative) associations among themselves, which is in line with previous studies in the area such as Siahaan et al. (2014), and Abdallah (2014), among others. The highest correlation between the independent variables is found to be 0.625, which is still lower than the maximum acceptable level of 0.8 (Gujarati, 2003).

The results of the VIF test, which ranges from a minimum of 1.18 to a maximum of 3.47 provide evidence of the absence of collinearity and multicollinearity. Consequently, the ability of

independent variables to predict dependent variable is not affected by relationship among independent variables.

4.3. Regression Result of Firm Attributes and Market Price per Share

This subsection presents the regression result of firm attributes and market price per share. Table 4 presents the OLS (robust) result of firm attributes and market price per share.

Table 4: Regression Result (OLS Robust) of Firm Attributes and Market Price per Share

Variables	Coefficients	t-Values
CONSTANT	-4.887	-0.20
PROF	35.151**	2.15
GROWTH	6.449	0.92
LEV	-7.020	-0.72
FS	1.715	0.53
BS	2.941***	3.00
BG	58.494***	2.68
ACC	-7.258	-0.35
ACM	-2.597	-1.60
MSO	-21.615***	-3.23
ISO	-15.513***	-2.72
Obs.		110
Hettest		0.0002
Skewness e		0.7274
Kurtosis e		2.3191
Wald Test		0.1743
Lagrangian multiplier		1.0000
R²		0.5292
Adjusted R²		0.4816
F-Value		6.68***

Source: STATA Output 13.0 based on data collected (2017).

NOTE: ***, ** and * indicate 1% and 5% and 10% significant levels respectively.

Table 4 presents the OLS (robust) regression result of the dependent variable (market price per share) and independent variables (profitability, growth, leverage, firm size, board size, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership). After OLS is run, a test of heteroskedasticity (Hettest) is carried out and the result is found to be significant, that is, errors have no constant variance, hence OLS robust standard error is conducted as remedial action. For the normality of error term, the Skewness and Kurtosis results are found to be within the acceptable range, meaning the error term is normally distributed. The Wald (F) test is also conducted and the result is found to be insignificant, meaning no time fixed effects are needed. The Breusch and Pagan Lagrangian multiplier test is therefore conducted in order to choose between OLS and GLS random effect result and the result is found to be insignificant, meaning that, there is no significant difference across units (no panel effect). Hence, OLS (robust) result is selected, presented in table 4.3 and interpreted thereafter.

The p-value indicates fitness and reliability of the model to show statistically significant relationship between dependent and independent variables. Hence, the p-value of 0.0000 provides evidence that the model is fit and the justification for the rejection of the null hypothesis that firm attributes have no significant impact on market price per share of listed industrial goods companies in Nigeria. The cumulative R^2 is 53% (0.53), which gives cumulative effect of all independent variables jointly on the dependent variable. Hence, it signifies that 53% of the total variation in market price per share of listed industrial goods companies in Nigeria is caused by profitability, growth, leverage, firm size, board size, board gender, audit committee composition, audit committee meeting, managerial and institutional share ownership. While the remaining 47% of the total variation in the market price per share is caused by factors not covered in the model. This indicates that the model is fit and the firm attributes are properly selected, combined and used as substantial amount of the market price per share is accounted for by the firm attributes. This can be confirmed by the value of F-statistics of 6.68 at 1% level of significance.

Table 4 shows that profitability has significant positive impact on market price per share of listed industrial goods companies in Nigeria at 10% level of significance. This finding is in line with signaling theory. The finding is consistent with the works of Chen and Chen (2011), Rajhans and Kaur (2013), Hermuningsih (2013), Abdallah (2014), Abba and Usman (2016), and Lestari and Armayah (2016). It is however, inconsistent with Adedoyin (2011). The study's finding implies that increase in profitability leads to increase in market price per share of the listed industrial goods companies significantly.

Growth has an insignificant positive impact on market price per share of listed industrial goods companies in Nigeria. The finding here, implies that increase in growth does not lead to significant increase in market price per share of the listed industrial goods companies. This contradicts signaling theory. One possible explanation for this is that some of the listed industrial goods companies in Nigeria have negative revenue growth. This finding is consistent with Adedoyin (2011), who reports that growth has an insignificant impact, but contrary to Hermuningsih (2013), and Abba and Usman (2016).

Leverage also has insignificant negative impact on market price per share of listed industrial goods companies. This implies that increase in leverage of listed industrial goods companies does not lead to increase in market price per share. This is contrary to the assumption of agency theory. The finding confirms the findings of Rajhans and Kaur (2013), and Abdallah (2014), while contradicts the works of Apergis and Sorros (2011), Hermuningsih (2013), Kaguri (2013), Granath and Thorsell (2014), Abdullahi (2016), and Abba and Usman (2016).

Firm size however, has insignificant positive impact on market price per share of listed industrial goods companies in Nigeria. This contradicts resource dependence theory postulation. This finding is consistent with Khodamipour et al. (2013), and Siahaan et al. (2014). It is however inconsistent with Adedoyin (2011), Abba and Usman (2016), and Abdullahi (2016).

The result also provides evidence that board size has significant positive impact on market price per share of listed industrial goods companies in Nigeria at 5% level of significance. The finding here, implies that increase in board size leads to significant increase in market price per share

of the listed industrial goods companies. This is in line with the resource dependence theory assumption. The finding contradicts Muhammad (2009).

Similarly, table 4 shows that board gender has significant positive impact on market price per share of listed industrial goods companies in Nigeria at 1% level of significance, as found in Haldar et al. (2014). There are however notable exceptions to this, such as Ahern and Dittmar (2011), and Akpan (2015). The finding implies that increase in board gender leads to increase in market price per share of the listed industrial goods companies significantly. This is consistent with the assumption of agency theory.

Looking at the impact of audit committee composition on market price per share, the regression result in table 4 shows that audit committee composition has insignificant negative impact on market price per share of listed industrial goods companies in Nigeria. The result here, indicates that the variation in the market price per share of the listed industrial goods companies cannot be explained by the audit committee composition. This is inconsistent with agency theory prediction. A number of things are perhaps the reasons for this contradictory result, for example, lack of experience of audit committee members or a threat to their independence. This finding is in contrast with Aanu et al. (2014).

Audit committee meeting on the other hand, has insignificant negative impact on market price per share of listed industrial goods companies in Nigeria. This means that increase in audit committee meeting does not lead to significant increase or decrease in market price per share of the listed industrial goods companies. This contradicts the assertion of agency theory. This finding supports the research results of Aanu et al. (2014), who also report insignificant impact, and contradicts Akpan (2015), who document significant positive impact.

Furthermore, managerial share ownership has significant negative impact on market price per share of listed industrial goods companies in Nigeria at 1% level of significance. This implies that increase in managerial share ownership leads to significant decrease in market price per share of listed industrial goods companies. This is in line with the agency theory entrenchment effect hypothesis. The result is similar to those of Saifullahi et al. (2015), and Akpan (2015). It is however, different from that of Muhammad (2009).

Institutional share ownership however, has significant negative impact on market price per share of listed industrial goods companies in Nigeria at 1% level of significance. This means that an increase in institutional share ownership other variables remaining constant, decreases the market price per share of listed industrial goods companies significantly. This is contrary to the assertion of agency theory. The conflicting result could be due to the low level of institutional share ownership in some listed industrial goods companies in Nigeria, since Thanatawee (2014), contend that institutional investors that hold only a few shares in the firm have low incentive to monitor as they can easily liquidate their holdings when the firm performance is poor. They may also diminish efficiency due to their passivity and myopic goals and firm value is then negatively affected (Saifullahi et al., 2015). The finding is contrary to Saifullahi et al. (2015).

5. Conclusions and Recommendations

Based on the findings of the study, the following conclusions are drawn:

- i. Listed industrial goods companies with high profits and large board sizes that are highly gender diverse tend to have more share prices than their counterparts.
- ii. Share prices of listed industrial goods companies in Nigeria decreases with increase in managerial and institutional share ownership.
- iii. In addition, the variation in the share prices of the listed industrial goods companies in Nigeria cannot be explained by growth, leverage, firm size, audit committee composition and meeting.

The following recommendations are made based on the conclusions of the study:

- i. Users of accounting information should be objective in assessing firm profitability in order to make wise investment decisions.
- ii. The management of listed industrial goods companies should strive to boost their sales so as to achieve the maximum sales growth necessary to maximize the share prices.
- i. The board of directors of listed industrial goods companies in Nigeria should decrease the level of leverage in their capital structure and give more attention to equity financing. This is because leverage has a negative impact on share prices, although insignificant.
- ii. Stakeholders of listed industrial goods companies in Nigeria should be mindful of the insignificant impact of firm size on share prices, so as not to give much attention to it when evaluating the share prices of the listed industrial goods companies in Nigeria.
- iii. The shareholders of listed industrial goods companies in Nigeria should increase their Board size in order to increase their share prices. However, they should ensure that it is not too large as a board with too many members is not likely to be effective.
- iv. The shareholders of listed industrial goods companies in Nigeria should ensure that all boards of directors are gender diverse as this has a lot of benefits attached to it which can enhance the share prices.
- v. The shareholders of listed industrial goods companies in Nigeria should ensure that the non-executive directors in the audit committee have the requisite skills, are selected purely based on merit and are independent of the management.
- vi. The shareholders and board of directors of listed industrial goods companies in Nigeria should check the level of independence of the audit committee, their attendance of meetings and frequency of their meetings so as to ensure that these meetings yield maximum benefits.
- vii. Users of accounting information should be mindful of the negative effect of managerial and institutional share ownership on share prices.

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