

## **Effect of Ownership Structure and Performance of Listed Conglomerates Firms in Nigeria**

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**Abstract:** This study analyses the effect of ownership structure and performance of listed conglomerates on the Nigeria Stock Exchange. Over the years manufacturing firms in Nigeria had been faced with liquidity risk, risk of opportunity loss, overcapitalization, undercapitalization, and longer cash conversion cycle. The secondary data used is obtained from six selected manufacturing firms listed on the Nigeria stock exchange for the period of five years 2016-2020. The objective of the study is to analyze the effect of ownership structure and performance. Return on Assets is used as a measure of firm performance while the account receivable days, inventory days, account payables, and total sales are used as measures of ownership structure. The first and third hypothesis is tested using correlation and regression, and the second hypothesis is tested using Analysis of Variance (ANOVA). The study revealed that there is a positive significant relationship between total sales and return on assets and a negative significant relationship between account receivable days, inventory days, account payables, return on assets. This indicates that an increase in account receivable days, inventory days, and account payable will lead to a decrease in return on assets and vice versa. Therefore, to meet the firms' objectives, which are to increase profits and create better investor value, an adequate ownership structure should be maintained and each of its different components should be effectively and efficiently managed and controlled.

**Keywords:** *Account payables, Account receivable day, Capital structure, Inventory days, Nigeria, Ownership structure, Return on asset.*

### **1. Introduction**

Knowing how much to invest in current assets and how much to invest in fixed assets is one of a manager's most crucial responsibilities in any firm to help it attain its maximum potential. This demonstrates that in all organizations, the ownership structure is an important aspect of the manager's role. The ownership structure of a company plays a critical role in the day-to-day operations of a company, whether profit-oriented or not. It is the difference between current asset and current liability and is defined as a company's total current asset less its total current debt at a particular point in time. The ownership structure of a firm determines how much capital is available to meet its financial needs. Working capital is the component of a company's capital that is used to fund current assets such as cash, marketable securities, debtors, and inventories (Pandey, 2008).

Companies need ownership structures to carry out their day-to-day operations, but without effective management of the available ownership structures, performance, liquidity, and shareholder value will suffer, affecting the firm's performance. It directly affects the liquidity and performance of corporations (Raheman & Nasr, 2007). Performance and liquidity are the two main objectives of ownership structure, according to Smith (1980). The ownership structure is crucial for assuring liquidity sustainability, solvency, and corporate performance (Mukhopadhyay, 2004). The ownership structure refers to the

effective or ineffective management of current assets and current obligations (Eljelly, 2004). On the one hand, it calls for the management and control of current assets and liabilities in a way that eliminates the danger of failing to meet short-term commitments on time as well as the avoidance of excessive investment in these assets. The success of the business may be positively impacted by effective ownership structure management, leading to improved revenue and shareholder wealth. Shin and Soenen (1998) contend that producing value for shareholders depends on an effective ownership structure.

The ownership structure plays a crucial part in the operation of a business, therefore depending on how it is managed; the capital structure can have both a negative and a positive impact on the company. A company's return on investment might quickly suffer from having too many current assets. Conversely, businesses with limited current assets may have shortages and struggle to sustain efficient operations (Van-Horne & Wachowicz, 2004). As a result, the finance manager must manage the Ownership structure effectively and efficiently to improve firm performance and create value for the organization.

This paper is organized as follows. Section 2 presents a review of the literature regarding ownership structure and performance. Section 3 describes the research methodology and data sources. Discussion of the results is presented in Section 4. Section 5 presents a discussion of findings while the conclusion and recommendations are in section 6.

## 2. Literature Review

The word "ownership structure" comes from the days of the old Yankee peddler, who would load his wagon with goods and then set off on his route to sell them. The item was characterized as his Ownership structure because it was sold or turned over for profit. Although the days of the Yankee peddler are long gone, the importance of the Ownership structure continues. Ownership structure is also referred to as the assets needed for the regular production of items that a firm would sell. The disparity between current assets and current liabilities is another name for it. It represents the sum invested in assets with a forecasted return during the trading year.

The ownership structure is also known as the gross ownership structure. In addition to current assets less current liabilities, it also contains short-term cash, marketable securities, inventory, and accounts receivable. A firm's ownership structure is an operational requirement, according to McMenamin (1999) because it needs short-term current assets, such as shares and cash, as well as debts, to run its daily operations. It is also referred to as "circulating capital" because it is the cash that a business needs to carry out its regular business operations. Ownership structure, also referred to as Net Ownership Structure, is a financial measure that assesses the company's operating liquidity. Operational capital is calculated as Current Assets minus Current Liabilities and includes ownership structure as well as fixed assets like plant and equipment. When current assets are fewer than current liabilities, an entity has an ownership structure shortfall, also known as an ownership structure deficit.

According to research done by Alipour (2013) among Iranian companies listed on the Tehran Stock Exchange between 2001 and 2006, he finds out that the ratio of payable accounts to total assets was 8%, the ratio of receivable accounts to total assets was 17%, and the ratio of inventory to total assets was 20%. For instance, in the same year, current debts as a proportion of total debts were 83 whereas current assets as a percentage of total assets were 62. Therefore, in Iranian firms, the ownership structure is highly significant, and the subject is proposed that the steps that companies take to manage ownership structure items have a beneficial impact on the profit and value of the organization. He also claims that the cash conversion cycle is an important metric for determining the efficiency of an ownership structure. In the hypothesis, he tests using multiple regression and Pearson's correlations. The statistical test of the hypothesis reveals a negative significant relationship between the number of days accounts receivable and performance, a negative significant relationship between inventory turnover in days and performance, a direct significant relationship between the number of days' accounts payables and performance, and a negative significant relationship between the cash conversion

cycle and performance. The study's findings demonstrated that there is a significant relationship between ownership structure and performance in the studied companies, that ownership structure has a significant impact on company performance, and that managers can increase value for shareholders by lowering receivables and inventory.

However, [Van-Horne and Wachowicz \(2004\)](#) noted that while a low amount of current assets can result in weaker liquidity and stock-outs, making it difficult to maintain operations, a high level of current assets may harm a company's performance. [Singh and Pandey \(2008\)](#) made an effort to look into the elements of ownership structure and how it affected the performance of Hindalco Industries Limited between 1990 and 2007. The results of the study show that the performance of Hindalco Industries Limited was significantly impacted by the current ratio, liquid ratio, receivables turnover ratio, and ownership structure to total assets ratio.

The relationship between corporate performance and ownership structure of listed businesses on the Athens Stock Exchange was examined by [Lazaridis and Tryfonidis \(2006\)](#) by using 131 publicly traded firms as a sample. They found that the cash conversion cycle and performance as measured by gross operating profit are statistically significant to each other. They also asserted that managers might create value for shareholders by effectively controlling the cash conversion cycle and keeping each individual component at its optimal level.

[Raheman and Nasr \(2007\)](#) conducted a study on the relationship between firm size and performance using a sample of 94 Pakistani companies listed on the Karachi Stock Exchange for a period of six years, from 1999 to 2004. They found that there is a strong relationship between firm size and performance, as measured by the natural logarithm of sales discovered that there was a negative relationship between variables of ownership structure, including the average collection period, inventory turnover in days, average collection period, cash conversion cycle, and performance after [Afza and Nazir \(2007\)](#) studied the conventional relationship between ownership structure policies and a firm's performance for a sample of 204 non-financial firms registered on the Karachi Stock Exchange between 1998 and 2005. The study showed that there are significant variations in ownership structure requirements and financing methods across industries and also a negative correlation between business performance and the degree of aggressiveness. They recommended managers improve shareholder value by being cautious when making decisions about ownership structure, investments, and financing practices.

[Dong and Su \(2010\)](#) looked at the impact of conversion cycle components on a company's performance. They discovered a strong negative link between business success and its capacity to minimize the cash conversion cycle time using data from the Vietnam stock market. They also believe that by maintaining the right amount of ownership structure, businesses can improve shareholder wealth. [Gill, Biger, and Mathur \(2010\)](#) used a sample of 88 companies listed on the New York Stock Exchange to study the connection between a firm's ownership structure and performance. He found a substantial correlation between the cash conversion cycle and business performance, and that the shorter the interval for collecting accounts receivable, the better the performance of the firm.

[Garcia-Teruel and Martinez-Solano \(2006\)](#) used a sample of 8,872 small and medium-sized European businesses to study the impact of ownership structure on firm ability. They concluded that reducing inventory and average collection durations had a favorable impact on the firm's profitability, as does reducing the cash conversion cycle. [Deloof \(2003\)](#) for example, conducted research on the relationship between ownership structure and the performance of Belgian enterprises from 1992 to 1996, using a sample of 1009 non-financial Belgian companies. He asserts a substantial negative association between gross profit and the average time of receivables, inventory, and payables. Managers could produce value for stockholders by reducing receivables and inventory time periods to reasonable minimums. These findings indicated that there is a specific amount of ownership structure that enhances business value. In order to validate the findings of [Soenen \(1993\)](#) on a larger sample and over a longer time period, [Jose, Lancaster, and Stevens \(1996\)](#) examined the relationship between aggressive ownership structure and the performance of the United States firms using Cash Conversion Cycle (CCC) as a measure of ownership structure, where a shorter Cash Conversion Cycle represents the

aggressiveness of ownership structure. The findings revealed a substantial negative association between the CCC and performance, implying that a more aggressive ownership structure is linked to better results. Lamberson (1995) researched how small enterprises adapt to changes in economic activity by modifying their ownership structure needs and level of current assets and liabilities, and Shin and Soenen (1998) found that another component of ownership structure has been studied by Lamberson (1995). Ownership structure requirements were measured using the current ratio, current assets to total assets ratio, and inventory to total assets ratio, while economic activity was measured using the index of the annual average coincident economic indicator. The analysis discovered a relatively tiny association between changes in economic conditions and changes in ownership structure, which was contrary to expectations. Afza and Nazir (2007) examined the relative relationship between the aggressive conservative Ownership structure policies and performance as well as the risk of firms for 208 public limited companies listed on Karachi Stock Exchange between 1998 and 2005. They found a negative relationship between Ownership structure policies and performance. Moreover, the result validates the findings of Carpenter and Johnson (1983) that there is no relationship level of the current assets and liabilities and risk of the firms.

### 3. Methodology and Data

In this study, Secondary data is employed for a period of 5 years from 2016 and 2020 from the sampled companies' annual financial reports and accounts for a period of 5 years each from 2016 and 2020. The population of the study comprises the 6 conglomerate companies listed on the Nigerian Stock Exchange. Descriptive statistics describe the information gotten from the secondary source of data used at arriving at the various conclusions reached by the researcher. The presentation is achieved by computing and analyzing the available data using the relevant ratios and statistical tools, SPSS (Statistical Package for Social Sciences Version 20.0) after which the outcomes were interpreted and discussed. In the course of data analysis, the various hypothesis earlier formulated are also subjected to test for their acceptance or rejection.

### 4. Discussion of Results

This section gives a detailed description of the information gotten from the secondary source of data used at arriving at the various conclusions reached by the researchers. The presentation is achieved by computing and analyzing the available data using the relevant ratios and statistical tools (SPSS 20.0) after which the outcomes were interpreted and discussed. In the course of data analysis, the various hypothesis earlier formulated are also subjected to test for their acceptance or rejection.

**Table 1.**  
Descriptive statistics.

	<b>N</b>	<b>Range</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Variance</b>
ROA	25	0.183	0.074	0.257	0.142	0.053	0.003
ARD	25	0.140	0.049	0.189	0.099	0.039	0.002
ID	25	0.308	0.405	0.713	0.562	0.086	0.007
AP	25	3.667	14.510	18.177	16.811	1.109	1.229
Sales	25	5.789	6.670	6.180	5.626	5.993	4.038

**Note:**

ROA - Return on Asset.

ARD - Account Receivable Day.

ID - Inventory Days.

AP - Account Payables.

#### 4.1. Descriptive Statistics

Descriptive statistics describe data in a comprehensible and organized way. [Table 1](#) shows the descriptive statistics of the variables of the study from the listed conglomerate firms for a period of five (5) years.

The ROA (Return on Asset) is used as a proxy to measure performance which also stands as a dependent variable. From the table, the ROA has a minimum value of 7.43% and the maximum value is 25.71% also with an 18.28% range. The mean value of the ROA is 14.22% with a standard deviation of 5.33% which shows that the ROA can deviate by 5.33%.

The ARD represents the Account Receivable Day which is used as a proxy to measure the account receivable day in the capital structure of the firm. The ARD as an independent variable has a minimum value of 4.91% with a maximum value of 18.94% and the range of ARD is 14.03%. The ARD also has a mean value of 9.96% and can deviate by 3.90%.

The ID on the other hand represents the Inventory Days and also a measure of capital management on listed conglomerate firms as well as an independent variable. From the table, the ID has a minimum value of 40.46% and also has a value of 71.29%, 30.82%, and 56.22% for the maximum, range, and mean values respectively. The ID has a deviation of 8.63%.

The AP represents the Account Payables which serve as a control variable to depict the firm size in which the natural logarithm of the total asset was taken. From [Table 1](#) the AP has a minimum value of 14.51, a maximum of 18.18, for the range 3.66, mean 16.81, and a standard deviation of 1.11.

Lastly, from the analysis above it can be noted that the ID has higher statistical values than that of the ARD (i.e the minimum, maximum, range, etc for ID > ARD). This shows that the firms have more Equity capital component in their capital management than debt.

#### 4.2. Correlation Analysis

The relationship between the dependent and independent variables can be demonstrated by correlation analysis. Additionally, it can demonstrate the connections between all the variables of the study.

**Table 2.**

Correlation analysis.

Correlation	ROA	ARD	ID	AP	Sales
ROA	1.000				
ARD	0.725	1.000			
ID	-0.466	-0.560	1.000		
AP	0.75	0.376	-0.466	1.000	
Sales	0.271	0.388	-0.126	0.75	1.000

**Note:**

ROA - Return on Asset.

ARD - Account Receivable Day.

ID - Inventory Days.

AP - Account Payables.

The table shows the correlation result as derived from the SPSS analysis. From [Table 2](#) the ARD (Account Receivable Day) has a correlation coefficient of 72.5 which shows a strong positive relationship between the ROA (Return on Asset) and the ARD (Account Receivable Day). On the other hand, the ID (Inventory Days) has a correlation coefficient of -46.6 which implies that there is a fairly weak negative relationship between the ROA (Account Receivable Day) and the ID (Inventory Days). Lastly, the TA Total Assets which is the control variable has a correlation coefficient of 27.1 showing a weak positive relationship between Log Sales and ROA.

Finally, the negative relationship between the ROA (Return on Asset) and ID (Inventory Days) shows that as the total equity of the firm increases, the profit (i.e. performance) of the firm decreases and

vice-versa. While the ARD (Account Receivable Day) on the other hand, as the debt ratio increases the profit of the firm increases and vice-versa.

#### 4.3. Regression Result

The regression analysis was conducted using the return on asset as the dependent variable and the independent variables were account payables, inventory, and account receivables. The results are tabulated.

**Table 3.**  
Model summary.

Regression Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error	F-value	D-Watson	Sig
ROA	0.728	0.531	0.464	1.039	7.933	1.682	0.001

**Note:** ROA - Return on Asset.

**Table 3** shows the model summary from the result of the SPSS 20.0 regression analysis from the table the model has an overall correlation (R) of 72.8 which shows a positive relationship between the ROA and the independent variable of the study. The R<sup>2</sup> shows the coefficient of determination and the extent to which the independent variable determines the dependent variable (ROA). From the table, the R<sup>2</sup> has a value of .531 which implies that 53.1% of changes in the dependent variable are determined by the independent variables (ARD and ID) while the rest are by other factors.

The Adjusted R<sup>2</sup> shows the coefficient of determination after the error element has been taken into consideration with a value of 46.4%.

The F-value shows the fitness of the model of the research and the responsiveness of the dependent variable to the independent variables. The F-value helps to make future predictions and show the combined effect of all the independent variables on the ROA (dependent variable) for every ₦1 increase on the independent variable the ROA increases by ₦7.93 and vice-versa.

The Durbin Watson value of 1.682 indicates serial correlation will not pose a problem to the validity of the statistical results within the period of the study and can serve as a rollout stress test for the research.

## 5. Discussion of Findings

The findings of this research work provide the basis for further discussions on the capital structures of firms especially the manufacturing-oriented ones and in relation to the different theories and previous research works for proper analysis and understanding of the work.

According to [Marsh \(1982\)](#) review of the literature, large businesses tended to choose long-term debt while small businesses tended to favor short-term debt. Based on statistics from developed nations with Germany as an exception, [Rajan and Zingales \(1995\)](#) and [Wald \(1999\)](#) proposed that was positively connected with debt.

It can also be claimed that because large businesses have more diluted ownership, agency theory ([Jensen, 1986](#)) and transaction cost economics ([Williamson, 1988](#)) suggest that they issue more long-term debt. However, because a relatively small number of shareholders can acquire a controlling interest in the companies, smaller enterprises are more vulnerable to shareholder intervention in cases of mismanagement.

The findings of this study have revealed some information about the capital structure of manufacturing companies in Nigeria. A crucial strategic financial choice that businesses must make is one regarding capital structure. The story of the enterprises' capital structure seems to be dominated by the trade-off theory. So policy must be geared toward enhancing the information environment. The facilitation of equity capital should receive more attention from policymakers since it serves as a foundation for additional borrowing, lessens the sensitivity of enterprises to economic cycles, and gives

quoted firms access to syndicates of private and institutional venture capital suppliers. Additionally, regulations could be implemented that incentivize quoted companies to access public equity capital by, for instance, lowering listing criteria and lowering flotation fees.

However, in nations where the costs of financial distress are minimal, size should not be highly positively correlated with leverage when used as a proxy for the (inverse) chance of default. Furthermore, the Pecking order hypothesis predicts that large organizations will have smaller informational asymmetries between insiders and the capital markets, making large firms better able to issue information-sensitive assets like equity. Both [Titman and Wessels \(1988\)](#) discovered data to support the contrary notion regarding the relationship between leverage and size.

Growth potential is another aspect that is thought to have an impact on the capital structure. The trade-off argument states that because growth opportunities cannot be collateralized, businesses that hold them tend to borrow less money than businesses that hold more tangible assets. In addition, agency theory contends that businesses frequently extort wealth from loan holders ([Jensen, 1986](#); [Myers, 1977](#)). Due to the asset substitution effect, businesses with more room for growth are able to invest in ways that are less profitable and so expropriate money from loan holders to shareholders.

The market is flooded with financial assets, each of which has advantages and disadvantages, making it challenging to decide on a capital structure policy. The goal of the capital structure policy, like the investment and dividend policies, is to maximize the value of the company by merely selecting the best source of financing.

## 6. Conclusion and Recommendations

Ownership structure is the efficient and successful management of both current assets and current liabilities. This study supports prior research by [Deloof \(2003\)](#); [Raheman and Nasr \(2007\)](#) who discovered a substantial inverse link between Return on Total Assets and the metrics of ownership structure (Account Receivable Days, Account Payable Days, and Inventory Days).

According to this study, there is a negative relationship between account receivable, account payable, and inventory days and the natural logarithm of sales, meaning that as these variables increase, the return on assets will decrease and vice versa. On the other hand, as the natural logarithm of sales increases, the reverse will occur. It also demonstrates how management of ownership structure in manufacturing enterprises plays a crucial role in a company's daily operations, which determines a company's success or failure and is a crucial factor in corporate financial decisions.

An optimal ownership structure is expected to contribute positively to the creation of firm value. To reach an optimal ownership structure, firm managers should control and manage adequately each component of the Ownership structure accurately. Therefore to meet the firm's objectives, which are to increase profits and create better investor value, an adequate Ownership structure should be maintained and each of its different components should be effectively and efficiently managed and controlled.

Given the above, this paper establishes that financial managers should ensure that each component of the Ownership structure (account receivable days, account payable days, and inventory days) are efficiently and effectively managed to avoid waste and create value for firms. And managers can create value for their shareholders by reducing the number of account receivables days, and inventory days to a reasonable minimum. Also, the manager of manufacturing firms should maintain a relatively high investment in current assets and the firm will be able to meet its short-term obligations as well as meet all sales orders, maintain smooth production and disrupt performance. It also unpacks that financial managers should formulate policies for the management of cash to ensure a continuous flow of cash and the ability to meet short-term ability as they fall due and surplus funds should be invested in performance ventures. Moreover, it asserts that management should maintain a short cash conversion cycle and careful evaluation should be made on both short and long cash conversion cycle including the effect both has on the organization policy, employees must have an understanding of the importance of ownership structure and adopt a good process of managing it in such a way that it will lead to high firm

performance. Inventory policies should be reviewed in light of changing economic factors such as demand and supply.

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The authors declare that they have no competing interests.

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Both authors contributed equally to the conception and design of the study.

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