**International Journal of Accounting, Finance and Risk Management**
2022; 7(2): 77-85
http://www.sciencepublishinggroup.com/j/ijafrm
doi: 10.11648/j.ijafrm.20220702.17
ISSN: 2578-9368 (Print); ISSN: 2578-9376 (Online)

# Leases Financing, Liquidity, and Return on Equity of Selected Manufacturing Companies in Nigeria: Implication of IFRS 16 Leases

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## To cite this article:

Shiyanbola Trimisiu Tunji, Desi Augustine, Oyedele Philips Olabode, Oyewumi Solomon. Leases Financing, Liquidity, and Return on Equity of Selected Manufacturing Companies in Nigeria: Implication of IFRS 16 Leases. *International Journal of Accounting, Finance and Risk Management*. Vol. 7, No. 2, 2022, pp. 77-85. doi: 10.11648/j.ijafrm.20220702.17

**Received**: June 4, 2022; **Accepted**: June 17, 2022; **Published**: June 27, 2022

**Abstract:** The new IFRS 16 standards, which replaced IAS 17, have brought changes affecting primarily leases, and while the lessor's accounting remains largely unchanged, this could result in changes in companies' investment decision options. Studies have argued that the new IFRS 16 has come with complexities affecting the financial and off-statement of financial position events. However, the extent of the effect on corporate return on equity, especially for manufacturing companies, remains unclear. As a result, the impact of lease financing and liquidity on the return on equity of selected listed manufacturing companies in Nigeria was investigated in this study. Secondary data was acquired from a population of 66 manufacturing organizations using an Expo facto research design. 10 companies were purposefully chosen and listed over a 10-year period from 2011 to 2020. The data was analyzed using descriptive and inferential statistics. Lease finance and liquidity were found to have a beneficial impact on return on equity ($Adj.R^2$ = 0.064; $F_{(4, 95)}$ = 18.57; *p-value* = 0.05). In introducing firm size as a controlling variable, the study revealed that firm size, leases financing and liquidity had a stronger positive effect on return on equity, ($Adj.R^2$ = 0.121; $F_{(5, 94)}$ = 28.29; *p-value* < 0.05). The study concluded that leasing and liquidity had a beneficial impact on the return on equity of selected Nigerian listed manufacturing enterprises. The study recommended that managers show competence when making lease finance and liquidity decisions because poor decisions could jeopardize the attainment of corporate goals and objectives.

**Keywords:** Firm Size, IFRS 16 Leases, Leases Financing, Leases Expenses, Liquidity, Operating Expenses, Return in Equity

## 1. Introduction

Investors in the corporate organization are incentivized and highly motivated when the issues of rewards on investment are brought fore. While meeting the rewards expectations of the shareholders can be quite challenging, optimal utilization of corporate human and capital resources is quite important in this circumstance. Ali [3] posited that effective investment decisions are essentially significant as the outcome of investment choices from streams of options and alternatives available in investment decisions and one of such options includes decisions regarding lease financing and the liquidity management of an organization. Existing and potential investors are concerned with the extent of the decisions of the management and are exposed to lease financing that will ultimately affect return in equity [5]. The return on equity is the outcome of the comprehensive performance of an organization, reflecting managerial competencies, effective investment decisions which included the purchase or lease investment decisions [12]. Making effective lease investment decisions that will produce effective financial performance and guarantee an adequate return on equity of manufacturing companies can be complex, and challenging considering the capital intensiveness and cost-effective desirability of the management.

Return on equity is one of the effective measures of

profitability of any corporate organization when lagged with the equity shareholders rewards against the number of shares ranking for the dividend [12]. Investment decisions and the possible outcomes, opportunities, and inherent risk assessments are holistically considered putting return on equity in perspective, as corporate management generates revenue and corporate growth from equity financing [25], hence return on equity is consistently in use to evaluate optimal utilization of corporate funding and shareholders tend to evaluate the performance of companies among their contemporaries in terms of performance [10]. Studies have documented that some of the problems of many manufacturing companies have been the leases financing and outright asset purchasing knowing that the manufacturing companies are associated with the heavy plant, property, and equipment that are quite expensive to buy or replace [34]. Then comes the option of lease financing and this is quite strategic and capital intensive.

IFRS 16 Lease financing is strategic due to the alternative arrangements of the long-term and medium-term terms it presents to manufacturing companies all over the world. Silvana, Valerico, Daniel, and Federico [31]; Santos, Ponte & Mapurunga [28] opined that in lease financing, the lessor company gives out the assets to another company and offers the lessee the right and opportunity to use the assets consequent to the periodic payment of an agreed sum upon such agreed conditions and term of payment. The lessee's periodic payment, known as lease rental, is a contractual obligation that must be honored. While the lessee has the privileges and right to use the assets in accordance with the contractual agreement, the lessor owns the assets [36]. As a result, the assets are returnable to the lessor at the conclusion of the stipulated contractual time, unless the contract gives the lessee the option to purchase at the contract's termination or renewal.

Generally, leasing enhances companies to access and deployed to its uses assets without having to buy them or incurring huge liquidity outflow at the beginning and also provides flexibility that it offers to the lessee in addressing the issues of obsolescence and residual risks associated with property and plant and equipment. Manufacturing companies tend to attach much premium on the usage of heavy equipment and plant utilization in actualizing the corporate effective production goals. Liquidity is significant in maximizing the shareholders' returns, as studies have advanced that liquidity has been linked to having a direct association with equity returns in manufacturing companies Tsalavoutas, Tsoligkas and Evans [38]: Souza and Borba [32]; Tanase, Calota, & Oncioiu [37]. Leasing improves the liquidity position of manufacturing companies when effective appraisal investment decisions are carried out comparing various alternatives.

The problem of this study lies with the complexity and challenges of meeting adequate equity return expectations of the manufacturing companies who are faced with the issues of lease financing options and appropriate investment decisions in order for them to remain afloat and still competitive in the industry where they belong, and at the same time have high control of the market share in the industry the companies operate. Prior studies have contended that adequate investment decisions of lease financing and liquidity management are capable of handling the problems and concerns of manufacturing companies in meeting return on equity goals and objectives Hladika and Valenta [19]; Vakhitov and Zamaletdinov [42]. The role of liquidity in the day-to-day activities and operation of the manufacturing companies in meeting daily and short-term liquidity obligations is paramount in meeting set goals and strategic plans of the companies Aguguom and Olanipekun [2]; Todorova and Sokolova [39].

Several studies have been undertaken on factors influencing enterprises' lease financing positions around the world Adebayo and Lateef [1]; Appiah, Awunyo, Mireku and Ahiagbah [7], Glaum, Schmidt, Street & Vogel [16] but none on financing and liquidity as they affect return on equity [1]. Leasing is one of the capital-acquisition financing solutions offered to businesses. Even though this option of financing is being well-practised mostly in developed economies, very few studies have been carried out on investigating the effects of lease financing and liquidity on corporate earnings and return on equity of the manufacturing companies in the developing world and less in developing economies where the option of lease financing has not been pronounced. Within the empirical review carried out in this study, only two past studies were conducted on the relationship between finance lease and liquidity of firms in Nigeria. However, Bello and Al-Mustapha [9] investigated the impact of lease financing options on liquidity in the oil and gas sector, but they solely used the current ratio as a measure of liquidity.

Divergent opinions and mixed results have prevailed in the literature of the possible effect of lease financing and liquidity on return on investment. While some studies have documented the positive effect of leasing financing on firm return on equity Ali [4], Bontas [8] and Musa [45], some others have reported the negative effect of lease financing on return on investments Lazar & Velte [21]; Hassan, Sarea & Kukreja [18]. Consequent to mixed results, inconclusiveness becomes imperative, and gaps in the literature. Beyond this, there is a dearth of studies that have considered the effect of lease financing and liquidity on return on equity. In Nigeria, fewer of these studies have been conducted in the emerging studies. This study fills the gap and examines the effect of lease financing and liquidity on the return on equity of selected listed manufacturing companies in Nigeria. This study proposed the following research objectives, research questions, and hypotheses as follows:

*Research Objectives*

i. To investigate the effect of lease and liquidity on the return on equity of selected Nigerian listed manufacturing companies.
ii. To investigate how the controlling effect of firm size influences the impact of lease financing and liquidity on the return on equity of selected Nigerian listed manufacturing companies.

*Research Questions*

i. To what extent do lease finance and liquidity affect the return on equity of Nigeria's publicly traded manufacturing companies?
ii. How does the controlling effect of firm size influence the impact of lease financing and liquidity on the return on equity of selected Nigerian listed manufacturing companies?

*Research Hypotheses*

i. Lease financing and liquidity do not have a significant impact on the return on equity of selected listed manufacturing companies in Nigeria.
ii. The controlling effect of firm size does not have significant influence on the impact of lease financing and liquidity on the return on equity of selected Nigerian listed manufacturing companies.

The rest of the study was structured in this manner: In section 2, the study undertook a literature and theoretical review. In section 3, the methodology was presented. Section 4 addressed data analysis, results, and discussion of findings, and in Section 5, the study ended with the conclusion, recommendations, and suggestions for future studies.

# 2. Literature and Theoretical Review

Return on Equity: Return on equity is concerned with the means of evaluating the extent of reward due to equity shareholders in proportion to the number of shareholdings that are ranking for dividends in a company. According to Kumar and Saini [20], return on equity is defined as one of the financial ratios used by shareholders to measure the organization performance of an organization and applied to compare the company with its peers in the category and the same industry. Managers are appraised by the amount of return on equity as well as a financial tool to measure stock valuation. Previous studies have documented that return on equity is a good measure to assess the effective lease financial investment decision of any manufacturing company that is faced with leasing or buying options. Posited that higher return on equity is a positive signal of corporate competence in investment decision in buy or lease option of manufacturing companies.

Lease Financing: Finance Lease: The finance lease according to Mazzi, Andre, Dionysiou and Tsalavoutas [23], a finance lease is a non-cancellable long-term contract in which the period of the assets could be the same as the useful life of the assets, while the rental lease payment can be made throughout this period. Evidently, when the lease period expires, the lessee could return, renew the contract or outright buy the asset. [24] further posited that some of the characteristics of a finance lease include: that all risk and potential accruable rewards incident to ownership is transferrable to the lessee, upkeep, maintenance, servicing and insurance is the lessee's responsibility. In addition, the lease tends to have a primary period that covers the life of the concerned asset.

Operating Lease. According to Ozturk and Sercemeli [26], an operating lease or wet lease is a cancellable short-term lease contract expected to be shorter than the useful life of the assets in the contract, in the circumstance, the operating lease the lessor is expected to be responsible for the upkeep of the assets, maintenance, periodic servicing and insurance of the leased assets [17]. Consistent with this understanding, Samaha and Khlif [27] stressed that all risks and rewards incident to the ownership lies with the owner (lessors) and at the same time, the contract can be canceled by any of the parties at a short time notice.

Liquidity: Liquidity is a term in finance that means the amount of capital available for investment. This capital could either be obtained on credit or it could cash in hand or the bank; although, most large companies prefer making use of borrowed money to make their investments. Liquidity can be defined as the ability of a business organization to meet or discharge its obligations as they mature; such obligations include current liability and long-term debts [18]. Liquidity measures the amount of cash or assets that can quickly be converted to cash. In other words, liquidity measures the availability of liquid assets. Liquid assets consist of cash and bank balances, debtors, and marketable securities. Liquidity is the ability to meet all financial obligations without endangering its financial conditions. Srea and Abdulla [29] noted that liquidity management is the ability of a business organization to have cash when and where needed. Liquidity management refers to planning and taking control where necessary in other to ensure that a firm has enough liquid assets to meet its obligations to customers which are coincidental to the existence of that firm.

IFRS 16: The new IFRS 16 lease standards effective January 2019, requires that the lessee recognizes on the statement of financial position all leases related assets and liabilities in the statements and their rights to use the asset for an agreed period covered in the lease contract and the arising payments and liabilities accruable during the period [29]. According to Tahat, Dunne, Fitfield and Power [35]; Yiadom & Atsunyo [43], the new IFRS 16 has come with new changes in assets and liabilities and such all companies including all the manufacturing companies practically involved in lease arrangement will be affected in their recognition of lease assets and expenses. Tsegba, Semberfan and Tyokoso [40] opined that by implication, the new IFRS 16 expunge all of the statement of financial statement metrics like gearing ratio and profit before interest and tax expenses. Though as it may, the new revised IAS 17 to IFRS 16 no doubt may enhance comparability but corporate covenants, credit ratings, borrowing expenses, and shareholders perception managers' performance [41]. The IFRS 16 leases affect some of the financial and corporate performance metrics like return on equity (ROE), operating cash flows, loans covenants, corporate gearing, current ratios assets turnovers, profit before interest and taxes, operating profits, net income, earning per share, consequently, managers aware of these, will be careful in making lease or buy investment decisions [15].

### *2.1. Theoretical Review*

Operating cycle theory was propounded by Richards and Laughlin in the years 1980. Operating cycle theory suggested that some assets are near liquid and that receivables, corporate inventories, and proponents of the operating cycle of organizations [33]. According to Sari, Altintas and Tas [30], the liquidity and availability of cash to handle the operational needs of companies depend largely on the rate of operational cycle conversion rate from finished goods to liquidity. The longer the time period, the more likely a corporation will be able to meet its financial obligations. The operating cycle theory postulates that working capital investments do not have the same life expectancy and their transformation into usable liquidity is not at the same speed. The operating cycle theory can be said to be the most central to liquidity management as it concerns itself with all the components and concepts which include the transformation of raw materials into finished goods, to receivables then receipts from receivables representing the cash aspect [33].

Stakeholders Theory: The stakeholder theory as proposed by F. Edward Freedman suggested that all persons and groups with an invested interest in a firm do so for a reward and that there is no prima facie precedence of one interest or benefit over another [44]. Stakeholders: Employees, government, customers, society and the environment substantially form the fundamentals of firms' stakeholders. In addition, stakeholders consider the other aspect of humanity and returns on investments from another perspective stakeholders. Freemen further suggested that firms need to recognize that shareholders of a company are just one of many other stakeholders [30]. The stakeholder ecosystem, as the theory, involves everyone having invested interest and is involved in the company: the Government and governmental agencies, the employees, customers, environmentalists within firms operations, corporate vendors, the society and anyone concerned that could be affected directly or indirectly with any possible fortunes or misfortunes in the company [26]. In the leasing supply chain practice [29], the interest of all the stakeholders is significant, as a breach of each of the stakeholders' interests, can disrupt the flow of the supply chain practice that leads to efficient and optimal utilization of corporate resources and achieving corporate return on equity expectations.

### *2.2. Empirical Review*

Silvana, Valerico, Daniel, and Federico [31] looked into the impact of IFRS 16 lease financing on small and medium-sized businesses in Europe. Secondary data was used in the study, and data from secondary sources was used to conduct analysis. Effective lease financing had a favorable impact on the performance of selected small and medium-sized businesses in Europe, according to the research.

Susanti, Sufiyati, and Dewi [34] investigated the impact of IFRS 16 implementation on selected Indonesian companies' key financial ratios. The research focused on the impact of airline operational performance and lease financing on the financial situation of airline operators, as well as the impact on their return on equity (ROE) and return on assets (ROA) based on total earnings. Data was gathered from a number of airlines, and research found that IFRS 16 implementations resulted in positive significant changes in the companies' earnings. The study also discovered that lease financing had a considerable favorable impact on the companies' return on equity (ROE) and return on assets (ROA).

Diaz, Hernandez, and Voicila [14] looked into the impact of lease accounting on the performance of publicly traded companies in the US. The study used an expo facto research design, which examined IFRS 16 and US GAAP standards using data from databases of a few selected firms. According to the findings, lease accounting and IFRS 16 are comparable to US GAAP and have a positive significant impact on firm performance.

Musa-Mubi [45] used 14 listed non-financial enterprises on the Nigerian Stock Exchange as sample subjects for a 9-year study on the effect of firm-specific variables on financing leasing use in listed non-financial firms in Nigeria. Secondary data was acquired from the sampled firms' annual reports and accounts, and the hypotheses were tested using ordinary least square regression analysis. Finance leasing should be included in the finance policy of small, profitable, and expanding listed non-financial enterprises in Nigeria, according to the study, because it can help maintain reserves and increase liquidity for the pursuit of suitable projects. Similarly, fiscal policy is essential for financially distressed enterprises that can improve solvency and operations by reinvesting capital through sale-leaseback agreements on non-collateral assets [13].

Bello, Ahmad, and Al-Mustapha [9] used six sampled firms to conduct a study on the influence of lease financing on the financial performance of the Nigerian Oil and Gas industry from 2005 to 2014. A financing lease was shown to have a positive impact on asset return; size and debt ratio had a significant impact on asset return; and an operating lease had a negligible association with asset return. According to the study, increasing lease finance levels could boost financial performance.

## 3. Methodology

The study used an expo facto research approach, obtaining data from published financial statements of chosen listed manufacturing companies in Nigeria for the 10-year period 2011-2020. The study's population included all 66 manufacturing enterprises that were listed on the Nigerian stock exchange as of December 31, 2020. A sample of 10 (ten) manufacturing companies was selected using a purposeful sampling technique. Return on Equity (ROE) is the dependent variable, while lease finance (LF), acid test ratio (ATR), inflation rate (INFR), and firm size are the independent variables (FRMZ) for the study. Descriptive statistics were adopted to examine mean, median, and mode, including the standard deviation parameters of variables and inferential analysis using pooled panel regression, while the interpretation was based on a 5% level of significance, as

fixed or random effects were interpreted based on the result of the Hausman test. The appropriate diagnostic tests were equally carried out to ensure that there was no stationarity of the variables. The models' specifications are:

$$ROE = f(LF, ATR, INFR) \quad (1)$$

$$ROE_{it} = \alpha_1 + \beta_1 LFIN_{it} + \beta_2 ATR_{it} + \beta_3 INFR_{it} + \mu_{it} \quad (2)$$

$$k_{it} = \alpha_1 + \beta_1 l_{1it} + \beta_2 l_{2it} + \beta_3 l_{3it} + \mu_{it} \quad (3)$$

$$ROE = f(LF, ATR, INFR, FRMZ) \quad (4)$$

$$ROE_{it} = \alpha_2 + \beta_4 LFIN_{it} + \beta_5 ATR_{it} + \beta_6 INFR_{it} + \beta_7 FRMZ_{it} + \mu_{it} \quad (5)$$

$$k_{it} = \alpha_2 + \beta_4 l_{4it} + \beta_5 l_{5it} + \beta_6 l_{6it} + \beta_7 l_{7it} + \mu_{it} \quad (6)$$

Where

ROE= Return on equity; LFIN = Lease financing; ATR = Acid test ratio; INFR = Inflation rate, FRMZ= Firm size; α= constant; μ = Error terms; it = Cross-section and Time series (panel data).

# 4. Data Analysis and Results

The influence of lease finance and liquidity on return equity among Nigeria's publicly traded manufacturing companies was experimentally evaluated in this study. The data in this area is analyzed for analysis and interpretation. The research is based on annual data from listed manufacturing businesses in Nigeria from 2011 to 2020. The following are the results of the analysis, and the discussion of the analysis is as displayed below:

### *4.1. Descriptive Analysis*

Table 1 shows the result of summary statistics of both dependent and independent variables (return on equity (ROE), lease financing (LFIN), acid test ratio (ATR), inflationary rate (INFR), and firm size (FRMZ)). The results display the number of observations, mean, median, standard deviation, minimum and maximum, skewness, and kurtosis.

***Table 1.*** *Descriptive Statistics.*

| VARIABLES | ROE | LFIN | ATR | INFR | FRMZ |
|---|---|---|---|---|---|
| N | 100 | 100 | 100 | 100 | 100 |
| Mean | 0.291 | 0.518 | 0.047 | 3.156 | 0.113 |
| p50 | 0.260 | 0.549 | 0.029 | 0.950 | 0.098 |
| Sd | 0.261 | 0.430 | 0.101 | 5.352 | 0.080 |
| Min | -0.973 | -2.388 | 0.000 | 0.000 | -0.060 |
| Max | 0.938 | 1.394 | 0.992 | 29.000 | 0.319 |
| Skewness | -0.467 | -3.018 | 8.311 | 2.944 | 0. 307 |
| Kurtosis | 7.759 | 22.033 | 77.770 | 12.169 | 2. 398 |

Source: Author's Computation, 2022.

There are 100 observations based on the data in Table 1. The average return on equity (ROE) is 0.291, implying that throughout the study period, the return paid for a business relative to the annual net profit made by enterprises per share was around 0.291. However, the minimum and maximum values of -0.973 and 0.938 imply that there were years during the research period when at least one of the enterprises had a ROE as low as -0.973, and there were years when a firm had a ROE as high as -0.938. Furthermore, the maximum and minimum values indicate that the firms' return on equity (ROE) vary significantly. The difference between mean and median (17.49) values confirms this fact.

The series is positively skewed, as indicated by the skewness value of 2.378. To put it another way, it indicates that the series is not widely circulated (greater than 0). The series is also leptokurtic, as indicated by the Kurtosis value of 13.947. That means the series is not widely available (greater than 3). However, as previously noted, the series' non-normality can be safely ignored. The skewness series was measured at -3.018; this indicates that the series is negatively skewed and not normally distributed (less than 0). The value of Kurtosis is 22.033, indicating that the series is leptokurtic and not normally distributed (greater than 3). However, as previously noted, the series' non-normality can be safely ignored.

The Acid Test Ratio (ATR) is 0.047 on average, with minimum and maximum values of 0.0 and 0.992, respectively, as a ratio of the inflationary rate to the market price per share. However, based on the standard deviation of 0.101 and the median of 0.029, it is safe to conclude that the sizes of the selected firms do not differ much. The series' skewness value is 2.311. This indicates that the series is favorably skewed and not normally distributed (greater than 0). The series is not normally distributed, as indicated by the Kurtosis score of 77.770. The series is positively skewed and not normally distributed, according to the results (this is greater than 0). The series is leptokurtic and not normally distributed, as indicated by the Kurtosis score of 12.169. However, as previously noted, the series' non-normality can be safely ignored.

***Table 2.*** *Correlation Matrix.*

| | PER | LFIN | ATR | INFR | FRMZ |
|---|---|---|---|---|---|
| PER | 1 | | | | |
| LFIN | 0.2338** [0.0192] | 1 | | | |
| ATR | -0.2008** [0.0452] | 0.2814*** [0.0046] | 1 | | |
| INFR | 0.0166 [0.8694] | 0.2623*** [0.0084] | 0.1431 [0.1556] | 1 | |
| FRMZ | -0.1736* [0.0841] | 0.3848*** [0.0001] | 0.2082** [0.0376] | 0.4754*** [0.0000] | 1 |

Source: Author's Computation, 2022. Note *, **, *** represents 10%, 5% and 1% significance levels respectively. P-value in the square bracket.

The correlation coefficients in Table 2 range from -0.2008 to 0.2338, the correlation coefficient between lease financing (LFIN) and return on equity (ROE) (r = 0.2338; P-value 0.05), as shown in Table 2, is positive and significant at the 5% level. The acid test ratio (ATR) and return on equity (ROE) have a negative and significant connection (r = -0.2008; P-value = 0.0452). The inflationary rate (INFR) and the return on equity (ROE) have a positive but negligible connection (r = 0.0166; P-value = 0.8694). The relationship is negative and significant at the 10% level for firm size (FRMZ) and return on equity (ROE) (r = -0.1736; P-value = 0.0841).

### *4.2. Regression Analysis*

This section shows the panel regression findings using pooled OLS, fixed-effect models, and random effect models. The estimation of the random effect regression model is the first step in the study. The Hausman-Statistics test is used to choose between Random and Fixed Effect models, whereas LM or Testpam-statistics are used to choose between Fixed and OLS models. Because it does not account for heterogeneity, any estimates obtained from it will be skewed and erroneous until there is evidence that no heterogeneity exists in the data, which includes both time series and cross-section observations.

***Table 3.*** *PER: Panel Data Analyses with and without Control Variable.*

| VARIABLES | | RM-WOCV (Model 1) | RM-WICV (Model 2) |
|---|---|---|---|
| LFIN | Coeff. | 2.774*** | 3.146*** |
| | t-stat. | (4.058) | (4.715) |
| | P-value | 0.000 | 0.000 |
| ATR | Coeff. | -6.795** | -5.849** |
| | t-stat. | (-2.427) | (-2.164) |
| | P-value | 0.015 | 0.030 |
| INFR | Coeff. | -0.046 | 0.006 |
| | t-stat. | (-0.590) | (0.077) |
| | P-value | 0.555 | 0.938 |
| FRMZ | Coeff. | | -11.981*** |
| | t-stat. | | (-2.805) |
| | P-value | | 0.005 |
| Constant | Coeff. | 1.433** | 2.385*** |
| | t-stat. | (2.245) | (3.174) |
| | P-value | 0.025 | 0.002 |
| Observations | | 100 | 100 |
| R-squared | | 0.179 | 0.242 |
| Adjusted. R-squared | | 0.064 | 0.121 |
| F-test [P-value] | | 18.57 [0.000] | 28.29 [0.000] |
| Hausman [P-value] | | 4.29 [0.232] | 2.93 [0.570] |
| LM [P-value] | | 23.93 [0.000] | 23.03 [0.000] |
| Testpam [P-valule] | | 4.69 [0.000] | 4.50 [0.000] |

Source: Author's Computation, 2022. Note: RM-WOCV means Random Model without Control Variable, RM-WICV means Random Model with Control Variable. *, **, *** represents 10%, 5% and 1% significance levels respectively.

$$ROE_{it} = \alpha_0 + \beta_1 LFIN_{it} + \beta_2 ATR_{it} + \beta_3 INFR_{it} + \mu it \quad (7)$$

$$ROE_{it} = 1.433 + 2.774*LFIN_{it} - 6.795*ATR_{it} - 0.046*INFR_{it} + \mu_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LFIN_{it} + \beta_2 ATR_{it} + \beta_3 INFR_{it} + \beta_4 FRMZ_{it} + \mu it \quad (8)$$

$$ROE_{it} = 2.385 + 3.146*LFIN_{it} - 5.849*ATR_{it} + 0.006*INFR_{it} - 11.981*FRMZ_{it} + \mu_{itnn}$$

### *4.3. Interpretation*

The panel analysis performed in this study to demonstrate the association between return on equity (PER) and dividend policy indicators with and without control variables is presented in Table 3. We conclude that panel effects exist and that random effect models are the suitable models based on the negligible values of Hausman test figures of 4.29 (p-value = 0.232) and 2.93 (p-value = 0.570). Table 3 summarizes the random effect results. The results in Table 3 show that there is a negative and statistically significant link between Lease Financing (LFIN) and Return on Equity (PER), with coefficients of 2.774 and 3.146 for models without and with control variables, respectively.

Furthermore, the correlation between acid test ratio (ATR) and return on equity (PER) is negative and statistically significant, with values of -6.795 and -5.849 for models without and with control variables, respectively. The F-statistics and corresponding probability values [F-statistic = 18.57 (p-value = 0.000); F-statistic = 28.29 (p-value = 0.000)] shown in the lower part of the table show that the coefficients of lease financing (LFIN), acid test ratio (ATR), inflationary rate (INFR), and firm size (FRMZ) are jointly statistically significant in explaining variations in the dependent variable (Market Price per Share (MPS)). The modified R-squared values are also 0.064 and 0.121, indicating that the models are sufficient.

Model 1: ($ROE_{it} = \alpha_0 + \beta_1 LFIN_{it} + \beta_2 ATR_{it} + \beta_3 INFR_{it} + \mu it$), at the significance levels of 0.05, the F-statistic values are 18.57 (P-value = 0.000; AdjR-squared = 0.064). By implication, the model revealed that the null hypothesis is rejected and the alternative accepted, meaning that lease financing and liquidity had a positive effect on return on equity.

Model 2: ($ROE_{it} = \alpha_0 + \beta_1 LFIN_{it} + \beta_2 ATR_{it} + \beta_3 INFR_{it} + \beta_4 FRMZ_{it} + \mu it$), when the control variable of Firm size was introduced, the result showed F-statistics = 28.29 (p-value = 0.000; AdjR-squared = 0.121) for the model implying that the study failed to accept the null hypotheses and conclude that lease financing and liquidity had a positive effect on return on equity.

## 5. Discussion of Findings

At a 1% significance level, the coefficient of Lease Financing (LFIN) is positive and substantially connected to Return on Equity (PER) with a coefficient of 2.774 and a P-value of 0.010. This substantial link means that LFIN changes the Return on Equity by 2.774 units (PER). When the control variable is included, the effect of Lease Financing (LFIN)

improves and remains statistically significant at a 1% level, causing a change in Return on Equity of around 3.146 units (PER). However, at a 5% level of significance, the finding demonstrates a negative and significant link between the Acid test ratio (ATR) and the Return on equity (PER), with a coefficient of -6.795. Given a unit decrease in ATR, this negative connection shows that PER improves by 6.795 units.

Furthermore, when the control variable is included, the coefficient stays negative and statistically significant at the 5% level. In contrast, the inflation rate (INFR) has a negative and statistically insignificant connection with the PER, with a coefficient of -0.046, and is positive when the control variable is taken into account. The findings of the study were found to be in line with the findings of previous investigations Silvana, Valerico, Daniel & Federico [31]; Susanti, Sufiyati & Dewi [34]; Diaz, Hernandez & Voicila [14]; Bello, Ahmad & Al-Mustapha [9]. On the contrary, the findings of Musa [45] and Bontas [8], both of which reported detrimental impacts, were found to be contradictory with the findings of the study.

Leases under IFRS 16 have the following implications: Without a doubt, the adoption of IFRS 16 will result in major changes in lease assets and liabilities on lessee companies' financial statements, as well as changes in profit before interest and tax, depreciation, and amortization Alexandru [6]; Bunea [11] and Magli [22]. According to the findings, organizations with sufficient meaningful off-statement of financial position lease commitments may see larger changes in their major financial indicators such as leverage ratios, return on equity, and likely valuation multiples. Management of the manufacturing companies could gain from the findings of this study considering the effects of effective lease financing and liquidity management in making lease or buy option decisions. The findings revealed in each of the two models especially, the importance of cash availability in the short term and liquidity management generally.

Consequently, lease financing and liquidity management strategies and quality appraisal techniques are paramount in decisions by the top management of manufacturing companies, as this could have a huge influence on the performance of the manufacturing companies. More so, the findings of the study will be additional information for corporate executives in the manufacturing sector and beyond faced with the responsibility of making financing decisions in Nigerian corporate bodies in making informed managerial decisions about lease financing From the findings of the study, it's hoped that these executives would be guided and better informed when they consider lease or purchase decisions for their firms.

# 6. Conclusion and Recommendations

### *6.1. Conclusion*

From the perspective of IFRS 16 leases, this study empirically aimed to examine the likely influence of leasing finance and liquidity on the return on equity of selected listed manufacturing companies. The study identified and created two models to solve the problem of return on equity: the effect of lease financing and liquidity on return on equity, and the addition of the controlling variable of firm size. The study's findings indicated a mixed bag: The results of model one showed that lease financing (LFIN) had a positive significance, while the acid test ratio had a negative-positive effect and the inflationary rate had a negative and insignificant effect. However, the joint statistics showed that leasing financing and liquidity had a positive effect on return on equity.

Furthermore, when the controlling variable of firm size was introduced into model 2, the results revealed that lease financing (LFIN) had a positive significant effect, while the acid test ratio (ATR) had a negative significant effect, while the inflation rate had a positive insignificant effect and the firm size (FRMZ) had a negative significant effect on return on equity. However, when the controlling influence of company size was paired with lease finance and liquidity, the result was a positive return on equity. As a result of the implementation of IFRS 16, the study found that lease financing and liquidity had a beneficial impact on the return on equity of selected listed manufacturing companies in Nigeria.

### *6.2. Recommendations*

The study concluded that financial statement preparers should be aware of the potential changes and implications of lease financing on the statement of financial position of manufacturing companies in relation to lease financing, as well as the treatment of IAS 17 and IFRS 16 recognition of depreciation in operating expenses and leases interest in interest expenses as they affect reportable earnings. Managers of the manufacturing companies should exercise professional competence in making lease financing and liquidity management decisions and faulty decisions are capable of jeopardizing the achievement of set corporate goals and objectives of the manufacturing companies. More, the managers ensure optimal that strict compliance to the new IFRS 16 is strictly adhered to when reporting the financial statements of the companies.

# Contribution for Future Studies

The study of IFRS 16 leases has provided new insights into the literature on the emerging and developing economies including Nigeria. While the novelty of this study will provide a strong foundation in contributing to knowledge, the aspect of the operating lease was not covered in our models as only leasing financing was considered, expecting that future studies can consider in this direction.

# References

[1] Adebayo, A. S., & Lateef, M. O. A. (2017). Accounting numbers and management's financialreporting incentives: Evidence from positive accounting theory. Noble International Journal of Economics and Financial Research, 2 (2), 50-53.

[2] Aguguom, T. A., & Olanipekun, E. (2021). Financial reporting quality and economic value added of listed companies sin Nigeria. Augustine University Journal of Social Sciences (AUJSS), 1 (1), 13-30.

[3] Ali, A. (2020). The level of adoption of the International Accounting Standard 16 (IFRS 16): the case of Bahrain listed companies. Journal of Economics Business Economics Research Journal, 3 (1), 142-150.

[4] Ali, S. A. M. (2021). Compliance with IFRS 16 mandatory presentation and disclosure requirements and company characteristics: Evidence from an emerging market. Scientific Journal for Financial and Commercial Studies and Researches (SJFCSR), 2 (1) 182-227.

[5] Alnaas, A., & Rashid, A. (2019). Firm characteristics and compliance with IAS/IFRS: Evidence from North African companies. Journal of Financial Reporting and Accounting, 17 (3), 383-410.

[6] Alexandru, T. L. 2018. The Advantages that IFRS 16 Brings to the economic environment, Ovidius University Annals. Economic Sciences Series, 18 (1), 510-513.

[7] Appiah, O., Awunyo-Vitor, D., Mireku, K., & Ahiagbah, C. (2016). Compliance with international financial reporting standards: the case of listed firms in Ghana. Journal of Financial Reporting and Accounting, 14 (1), 131-156. doi: 10.1108/JFRA-01-2015-0003.

[8] Bontas, C. A. B. (2017). Lease Accounting Under IFRS 16 and IAS 17 - A Comparative Approach. The Journal Contemporary Economy, 2 (2), 78-84.

[9] Bello, U., Ahmad, B., & Al-Mustapha, B. (2016). Impact of lease financing on liquidity of Nigerian oil & gas companies. International Journal of Social Studies, 78 (9), 45-67.

[10] Bova, F., & Pereira, R. (2012). The determinants and consequences of heterogeneous IFRS compliance levels following mandatory IFRS adoption: Evidence from a developing country. Journal of international accounting research, 11 (1), 83-111.

[11] Bunea-Bontaş, C. A. (2017). Lease accounting under IFRS 16 and IAS 17–a comparative approach. Revista Economia Contemporană, 2 (2), 78-84.

[12] Cotei, C., & Farhat, J. (2017). The leasing decisions of startup firms. Review of Pacific Basin Financial Markets and Policies, 20 (4), 1-30.

[13] Diaz, I. M., Hernandez, M. A., & Voicila, F. I. (2019). Lease accounting: an inquiry into the origins of the capitalization model. De Computis, Revista Española de Historia de la Contabilidad, 16 (2), 160-187.

[14] Diaz, M. J., & Ramirez, C. Z. (2018). IFRS 16 (Leases) implementation: impact of entities' decisions on financial statements. AESTIMATIO. The IEB International Journal of Finance, 17, 60-97.

[15] Giner, B., & Pardo, F. (2018). The value relevance of operating lease liabilities: Economic effects of IFRS 16. Australian Accounting Review, 28 (4), 496-511.

[16] Glaum, M., Schmidt, P., Street, D., & Vogel, S. (2013). Compliance with IFRS 3- and IAS 36- required disclosures across 17 European countries: company- and country-level determinants. Accounting and Business Research, 43 (3), 163-204. doi: 10.1080/00014788.2012.711131.

[17] Guerreiro, M. S., Rodrigues, L. L., & Craig, R. (2008). The preparedness of companies to adopt International Financial Reporting Standards: Portuguese evidence. Accounting Forum, 32 (1), 75-88.

[18] Hassan, S., Sarea, A., & Kukreja, G. (2019). Testing the level of compliance of international accounting standard IAS 38: Evidence from Bahrain. Accounting and Finance Research, 8 (3), 136-148.

[19] Hladika, M., & Valenta, I. (2018). Analysis of the effects of applying the New IFRS 16 leases on the financial statements. 36th International Scientific Conference on Economic and Social Development – "Building Resilient Society, 14 (5), 255 -263.

[20] Kumar, G., & Saini, J. (2016). Determinants of IFRS compliance by Canadian companies. International Journal of Corporate Finance Accounting & Finance, 3 (2), 42-57.

[21] Lazar, L., & Velte, P. (2018). Determinants of mandatory goodwill disclosure: the case of impairment testing in Germany. International Journal of Managerial Financial Accounting, 10 (4), 301-330.

[22] Magli, F., Nobolo, A., & Ogliari, M. (2018). The effects on financial leverage and performance: The IFRS 16. International Business Research, 11 (8), 76-89.

[23] Mazzi, F., André, P., Dionysiou, D., & Tsalavoutas, I. (2017). Compliance with goodwill-related mandatory disclosure requirements and the cost of equity capital. Accounting and Business Research, 47 (3), 268-312. doi: 10.1080/00014788.2016.1254593.

[24] Morales, J., & Zamora, C. (2018). IFRS 16 (leases) implementation: Impact of entities' decisions on financial statements. Aestimatio: The IEB International Journal of Finance, 17, 60-97.

[25] Osadchy, E. A., Akhmetshin, E. M., Amirova, E. F., Bochkareva, T. N., Gazizyanova, Y. Y., & Yumashev, A. V. (2018). Financial statements of a company as an information base for decision-making in a transforming economy. European Research Studies Journal, 21 (2), 339-350.

[26] Ozturk, M., & Serçemeli, M. (2016). Impact of new standard" IFRS 16 Leases" on the statement of financial position and key ratios: A case study on an airline company in Turkey. Business Economics Research Journal, 7 (4), 143-157.

[27] Samaha, K., & Khlif, H. (2016). Adoption of and compliance with IFRS in developing countries: A synthesis of theories and directions for future research. Journal of Accounting in Emerging Economies, 6 (1), 33-49. doi: 10.1108/JAEE-02-2013-0011.

[28] Santos, S., Ponte, R., & Mapurunga, R. (2014). Mandatory IFRS adoption in Brazil (2010): Index of compliance with disclosure requirements and some explanatory factors of firms reporting. Revista Contabilidade Finanças, 25 (65), 161-176.

[29] Sarea, M., & Abdulla, Z. (2015). The level of compliance with International Financial Reporting Standards (IFRS 7): Evidence from Bahrain. Scientific Journal for Financial and Commercial Studies and Researches, 42 (5), 1-12.

[30] Sari, E. S., Altintas, T., & Tas, N. (2016). The effect of the IFRS 16: Constructive capitalization of operating leases in the Turkish Retailing Sector. Journal of Business, Economics and Finance, 5 (1), 138-147.

[31] Silvana, S., Valerico, B., Daniel, I., & Federico, C. (2020). Relevance in the application of IFRS 16 for financial statements: Empirical evidence of the impact of the finance methods in SMEs. Chinese Business Review, 19 (1), 1-15.

[32] Souza, M., & Borba, A. (2017). Value relevance vis-a-vis disclosure on business combinations and goodwill recognized by publicly traded Brazilian companies. Revista Contabilidade Finanças, 28 (73), 77-92.

[33] Spanberger, J., & Rista, M. (2020). Implications of IFRS 16 adoption: Evidence from Swedish publicly listed firms. (Independent thesis Advanced level (degree of Master (One Year)) Student thesis). Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva414750 DiVA database.

[34] Susanti, M., Sufiyati, A. C., & Dewi, S. P. (2020). The impact of IFRS 16 (PSAK 73) implementation on key financial ratios: An evidence from Indonesia. Advances in Economic, Business and Management Research, 17 (5), 432-448.

[35] Tahat, A., Dunne, T., Fifield, S., & Power, M. (2016). The impact of IFRS 16 on the significance of financial instruments disclosure: Evidence from Jordan. Accounting Research Journal, 29 (3), 241-273. doi: 10.1108/ARJ-08-2013-0055.

[36] Tran, T., Ha, X., Le, T., & Nguyen, N. (2019). Factors affecting IFRS adoption in listed companies: Evidence from Vietnam. Management Science Letters, 9 (13), 2169-2180.

[37] Tanase, A. E., Calota, T. O., & Oncioiu, F. R. (2018). The impact of IFRS 16 on the companies' key performance indicators: limits, advantages and drawbacks. Academic Journal of Economic Studies, 4 (1), 54-59.

[38] Tsalavoutas, I., Tsoligkas, F., & Evans, L. (2020). Compliance with IFRS mandatory disclosure requirements: a structured literature review. Journal of International Accounting, Auditing and Taxation, ForthcomingnAvailable at SSRN 3513301.

[39] Todorova, E. S., & Sokolova, N. V. (2019). IFRS 16 leases and its impact on companies financial reporting, financial ratios, and performance metrics. Economic Alternatives, 1 (1), 44-62.

[40] Tsegba, I., Semberfan, J., & Tyokoso, G. (2017). Firm characteristics and compliance with International Financial Reporting Standards (IFRS) by listed financial services companies in Nigeria. Applied Finance Accounting & Finance, 3 (1), 83-93.

[41] Uyar, A., Kılıç, M., & Gökçen, B. A. (2016). Compliance with IAS/IFRS and firm characteristics: evidence from the emerging capital market of Turkey. Economic research-Ekonomska istraživanja, 29 (1), 148-161.

[42] Vakhitov, D. R., & Zamaletdinov, A. (2015). Leasing as a factor of economic growth. Procedia Economics and Finance, 2 (3), 839-845.

[43] Yiadom, E., & Atsunyo, W. (2014). Compliance with international financial reporting standards by listed companies in Ghana. International Journal of Business Management, 9 (10), 87-100.

[44] Wong, K., & Joshi, M. (2015). The impact of lease capitalization on financial statements and key ratios: Evidence from Australia. Australasian Accounting, Business and Finance Journal, 9 (3), 27-44.

[45] Musa-Mubi, G. (2017). The effect of firm-specific attributes on finance lease use in listed non-financial firms in Nigeria. European Journal of Reasearch and Reflection in Management Sciences, 3 (3), 32-48.