

Research Paper

IFRS 16 adoption and financial performance of listed manufacturing companies in Nigeria

Submitted on 11th May 2024

Accepted on 13rd September 2024

Evaluated by a double-blind review system

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ABSTRACT

Purpose: The objective of this study is to examine IFRS 16 adoption and its impact on financial performance of listed manufacturing companies in Nigeria.

Methodology: This paper empirically examines the relationship between IFRS 16 adoption and its impact on liquidity, leverage and profitability of Nigeria listed manufacturing companies between 2015 and 2022. The empirical methodology selected was panel data ordinary least square regression analysis.

Results The results indicate that the adoption of IFRS 16 has significant impact on the profitability, leverage, and liquidity of the sampled manufacturing companies.

Research limitations: The study relied on the annual reports of listed manufacturing companies in Nigeria between the period 2015-2022. During the Pre and post adoption of IFRS 16. Other sectors which have implemented IFRS 16 could not be covered neither could a survey be conducted to assess the inherent challenges of implementing IFRS 16 in Nigeria.

Practical implications: Studies in developed countries have proven that the changeover from IAS 17 to IFRS 16 promises to promote business valuation and financial statements comparability and transparency. This study will provide research evidence to support this assertion from a developing country's perspective. This study will enhance compliance with the standard by corporate management of organisations and promote its implementation across other industry sectors not covered in this study.

Originality: This research work contributes to the development of literature on the decision usefulness of financial statements with the adoption of IFRS 16 from an emerging economy perspective.

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Keywords: *IFRS 16, Financial Performance, Leases, Manufacturing companies, leverage, liquidity*

1. Introduction

The financial performance of a business shows how successfully it uses its resources to create revenue, profitability, and growth. Stakeholders need it to assess corporate performance in terms of liquidity, solvency, profitability, efficiency, and market value so as to make value relevant decisions.

The manufacturing sector is the heart of every economy including Nigeria. By transforming raw materials into finished products, the industry not only contributes to increased profits and commerce on a global scale, but helps to generate revenue for the government. In recent decades, technological innovation has been a primary driver of industrial revolutions of many countries and this requires significant financial investments on heavy equipment and facilities.

The Nigeria manufacturing industry has had difficulty financing technological innovations or procuring the long-term equipment investments it requires. This is made worse by the global financial crisis, the credit crunch, increasing interest rates, and the short-term lending practices of commercial banks. The manufacturing sector was responsible for 12 percent (380billion naira) of the total leasing volumes in Nigeria during the first quarter of 2022. (Equipment Leasing Association of Nigeria, 2023). But recent studies show that many manufacturing organizations struggle to choose between lease finance and asset acquisition (Arema & Ayorinde, 2022).

Since the implementation of IFRS 16 – Leases, there have been major changes to the lease recognition, measurement, and disclosure processes. When determining whether or not a lease is a finance lease, lessees will no longer be required to consult IAS 17 paragraph 10. Instead, lessees are required to account for all leases in accordance with IFRS 16, which governs financing leases (Segal & Naik, 2019).

Financial accounting standards are established to deliver relevant information to financial report readers (Runesson, 2015). Without a doubt, the goal of IFRS 16 is to improve the comparability of financial statements and address the perceived lack of openness of IAS

17 (Magli, Nobolo, Ogliari, 2018). However, as a result of this standard, all operating leases will be treated as liabilities, which will be amortized over the course of the period of the lease. This may have a critical effect on the total liabilities and operating expenses that companies will report in their financial statements.

Furthermore, companies may have to make regular lease payments as against the IAS 17 era which could negatively affect entities with a high number of leased assets especially in the manufacturing sector. It will change the recognition of assets and liabilities and undoubtedly have a significant impact on some key performance ratios.

Studies in developed countries have proven that the changeover from IAS 17 to IFRS 16 promises to promote business valuation and financial statements comparability and transparency (IFRS Foundation, 2019; Tănase, Traian & Florin, 2018; Marenkov & Veselova, 2019) but few studies from emerging economies have analysed the implications of implementing this standard on financial performance. Hence, this study attempts to fill this gap by exploring how IFRS 16 adoption impacts Nigerian manufacturing enterprises' financial performance.

The study examines the impact of IFRS 16 adoption on financial profitability, financial leverage and liquidity of quoted manufacturing companies in Nigeria. For this research work the following null hypotheses are formulated:

Hypothesis One:

H₀: The adoption of IFRS 16 has no significant impact on profitability.

Hypothesis Two:

H₀: The adoption of IFRS 16 has no significant impact on leverage

Hypothesis Three:

H₀: The adoption of IFRS 16 has no significant impact on liquidity.

2. Literature Review

This section covers a conceptual, empirical and theoretical review of literature in relation to IFRS 16 Leases and financial performance.

2.1. 1 IFRS 16 Leases

IFRS 16 governs lease recognition, measurement, presentation, and disclosure (IFRS Foundation, 2019). The standard's principal goal is to accurately portray lease transactions so financial statement readers may analyze lease cash flows' quantity, timing, and uncertainty. Lessees should be able to recognize assets and liabilities for all leases beyond 12 months, unless the lease is of low value.

IFRS 16 distinguishes leases from service contracts depending on whether customers may control the leased asset. The right to govern the use of an asset for a term in return for money is a lease. With this term, the IASB attempted to address off-balance sheet finance. IFRS 16 should change organizations' statements of financial position, income statements, and cash flow statements with large off-balance sheet leasing arrangements.

2.1.2 Recognition and Measurement

Three recognition and measurement exemptions are in IFRS 16. (IFRS 16:5). Application of these exclusions results in accounting treatment comparable to operating lease accounting (IFRS 16:5). It identifies payments straight-line.

Short-term leases are 12 months or less. Purchase option leases are not short-term (IFRS 16:8). Leases with low-value assets: Although the guideline does not define 'low value', the IASB considered assets worth less than USD 5,000. (IFRS16:BC100). Examples include: Mineral, oil, natural gas, and other non-renewable resource leases. IAS 41 Agriculture lessees' biological asset leases. Licensing agreements under IAS 38 include motion pictures, picture films, video recordings, plays, manuscripts, patents, and copyrights.

2.1.3 Accounting Model for Lessees

IFRS 16 recognizes a right-of-use (asset) and a debt when a lessee joins a lease contract (lease liability). Initially, the lease obligation is the present value of future lease payments. Initial right-of-use equals liability plus the lessee's initial direct expenditures, prepayments to the lessor, expected restoration, removal, and disassembly costs, and less any lease incentives from the lessor. To calculate lease debt, organizations should accumulate interest at the discount rate set at lease beginning and deduct payments. IAS 16 amortizes right-of-use and IAS 36 impairs it. (Morales-Díaz & Zamora-Ramírez, 2018).

2.1.4 Measures of Financial Performance

Business financial health is assessed by financial performance. These measurements show the company's profitability, liquidity, leverage, and efficiency. Financial performance measurements assist investors, creditors, and other stakeholders in deciding whether to invest, lend, or conduct business with the firm. This research discusses typical financial performance indicators used to assess a company's health. Evaluation of a business's financial health requires financial performance measures. To comprehend a company's financial status, different measurements must be considered, depending on industry and goals. Financial ratios help businesses make future choices, according to Boronos, Zakharkin, Zakharkina & Bilous (2020). These measures reveal a company's liquidity, profitability, efficiency, and stability. Properly managing these ratios may reveal the company's strengths and weaknesses.

A company's profitability ratio compares profits to sales, assets, or equity. Standard profitability ratios include gross, net, ROA, and ROE (ROE). After deducting product costs, gross profit margin is the percentage of revenue remaining. Net profit margin is the percentage after all expenses. ROA evaluates a company's ability to produce profits from its assets, whereas ROE measures its owners' equity.

Leverage ratios assess a company's long-term obligations. Standard solvency ratios include debt-to-equity and interest coverage (Finger *et al.*, 2018). The debt-to-equity ratio shows leverage, whereas the interest coverage ratio shows the company's profit-making ability to pay interest.

Liquidity ratios assist debtors to assess their capacity to repay debt without outside cash. An organization's liquidity ratios indicate its capacity to meet short-term commitments and cash flows. They include fast, current, and days sales outstanding (Săcărin, 2017).

2.2.1 Theoretical Framework

A few different theories of socioeconomic accounting were borrowed to form a sound foundation to substantiate the adoption of IFRS16.

The theories selected for this study are:

2.2.2 The theory of asymmetric information

Information asymmetry exists between two parties when one party has more information than the other (Akerlof, 1970).

This theory is relevant to this study because IFRS 16 adoption has reduced the information asymmetry between management and shareholders, by ensuring management disclose their material off-balance sheet lease contracts. The management, by the adoption of IFRS 16, is required to account for lease contracts exceeding one financial year.

2.2.3 The Isomorphism theory

This theory describes how organizations submit to institutional constraints by adopting identical structures, methods, and behaviors. Coercive, mimetic, and normative isomorphism are forms of isomorphism. Coercive isomorphism applies to this study because manufacturing companies are compelled to adopt IFRS 16 because they are listed on the Nigerian Exchange group. Furthermore, some of these companies are multinationals, and their parent company adopts IFRS as their financial accounting standard, hence for the purpose of consolidation and comparability, these companies are required to account for their leases in line with IFRS 16.

2.3.1 Empirical Review of Literature

Silvana, Valerico, Daniel, and Federico (2020) examined how IFRS 16 lease financing affects European SMBs. The investigation and analysis employed secondary data. According to the report, effective lease finance helped selected European SMBs operate better.

Susanti, Sufiyati, and Dewi (2020) examined how IFRS 16 affected selected Indonesian firms' key financial ratios. The study examined how airline operational performance and lease financing affect airline operators' financial status and profitability, using return on equity (ROE) and return on assets (ROA) as proxy. A few airlines' profitability improved after IFRS 16 adoption, according to study. The research also found that lease financing improved firms' ROE and ROA (ROA).

Diaz, Hernandez, and Voicila (2019) examined how lease accounting affects US publicly listed corporations. A few chosen businesses' datasets were utilized to test IFRS 16 and US GAAP requirements in an ex post facto study. The study found that IFRS 16 and lease accounting (its equivalent to US GAAP) both improve business performance.

Musa-Mubi (2017) studied the influence of firm-specific factors on financing leasing across 14 listed non-financial businesses on the Nigerian exchange group over nine years.

Secondary data from the chosen businesses' annual reports and accounts was used to test hypotheses using ordinary least square regression. The results showed that finance leasing was beneficial to growing listed non-financial firms in Nigeria in order to retain reserves and enhance liquidity for relevant projects.

Bello, Ahmad, and Al-Mustapha (2016) examined how lease financing affected the Nigerian oil and gas industry's financial performance from 2005 to 2014. Asset return was positively correlated with finance lease, while size, debt ratio, and operational lease were not. The research suggests boosting leasing financing might increase financial performance.

Shiyanbola, Desi, Oyedele, and Oyewumi (2022) evaluated how IFRS 16 affected lease finance, liquidity, and return on equity of selected Nigerian manufacturing enterprises. The study examined ten industrial businesses listed on The Nigerian Exchange Group over ten years using ex post facto research approach. The research found that leasing and liquidity improved the return on equity of selected Nigerian listed manufacturing enterprises.

Sabreen (2022) examined how IFRS16 leasing contracts affected leased unit financial reporting. The study showed that IFRS16 has a statistically significant influence on the lessee's financial statements' qualitative information.

Eleonora and Nadya (2019) analyze how IFRS 16 affects financial reporting, ratios, and performance measurements. They found that EBITDA will rise for lessees with large past off-balance sheet leases as IFRS 16 increases leased assets (right-of-use assets) and financial obligations on their balance sheets.

3. Methodology

Ex post facto research design is used in this study to anticipate causation from past activities. Therefore, a researcher cannot change past acts or behaviors or participant qualities and attributes. A total of forty – seven (47) manufacturing companies in the industrial and consumer goods sector of Nigeria (retrieved from the website of The Nigerian exchange group) as at 2023 formed the population of the study. The simple random sampling technique was employed in selecting seventeen (17) listed companies in the industrial and consumer goods sector of Nigeria.

Similar with the study of Eleonora and Nadya (2019) who used Right-of-use (ROU) asset, lease liability, interest expense, and DROU asset depreciation, as the explanatory variables for IFRS16, this study used the same proxy for IFRS 16. Financial performance was measured using return on asset -ROA (profitability), debt to capital –DC (leverage), and current ratio- CR (liquidity) in the line with the studies of Mary and Charles (2017) and Săcărin (2017). Regression analysis was utilized to assess the impact of IFRS 16 implmmentation on financial performance. The econometric relationship between the study's variables are expressed below:

$$ROA_{it} = \alpha_0 + \beta_1 ROU_{it} + \beta_2 LL_{it} + \beta_3 IE_{it} + \beta_4 DROU_{it} + \mu_{it} \dots \dots \text{Equ 1}$$

$$CR_{it} = \alpha_0 + \beta_1 ROU_{it} + \beta_2 LL_{it} + \beta_3 IE_{it} + \beta_4 DROU_{it} + \mu_{it} \dots \dots \dots \text{Equ 2}$$

$$DC_{it} = \alpha_0 + \beta_1 ROU_{it} + \beta_2 LL_{it} + \beta_3 IE_{it} + \beta_4 DROU_{it} + \mu_{it} \dots \dots \dots \text{Equ 3}$$

Where:

ROA = Return on Asset

CR = Current Ratio

DC = Debt to capital ratio

ROU= Right-of-use asset,

LL =lease liability

IE = interest expense and

DROU= Right-of-use asset depreciation

i = Cross-section

t = time (years)

4. Results

4.1. Descriptive statistics

Table I: Descriptive Statistics on IFRS 16 Adoption and Financial Performance Indicators

	DC	ROU	IE	LL	DROU	ROA	CR
Mean	1.041476	5.535830	5.707047	4.885322	5.647230	0.972218	1.028177
Median	1.031777	0.000000	0.000000	0.000000	0.000000	0.980123	1.028454
Maximum	1.197856	17.57286	17.57286	17.39411	17.39411	1.329654	1.091191

Minimum	0.954324	0.000000	0.000000	0.000000	0.000000	0.845658	0.93079 9
Std. Dev.	0.043518	6.441524	6.502581	6.072463	6.391040	0.056930	0.02562 2
Skewness	0.973673	0.423144	0.364087	0.555756	0.360929	3.161613	- 0.470347
Kurtosis	4.457009	1.398685	1.326164	1.521925	1.319513	23.99127	3.99902 4
Jarque-Bera	31.54685	17.49555	17.77047	18.24089	17.84061	2563.289	10.0424 2
Probability	0.000000	0.000159	0.000138	0.000109	0.000134	0.000000	0.00659 7
Sum	133.3089	708.5863	730.5020	625.3212	722.8454	124.4439	131.606 6
Sum Sq. Dev.	0.240513	5269.640	5370.013	4683.101	5187.364	0.411611	0.08337 4
Observations	128	128	128	128	128	128	128

Key:DC – Debt to Capital, ROU – Log of Right-of-use asset, IE – Log of Interest Expense, LL – Log of Lease Liability, DROU – Log of Depreciation of Right-of-use asset, ROA – Return on Asset, CR – Current Ratio.

Source: Author's Computation (2023)

This study's descriptive statistics section sheds light on the financial performance of selected manufacturing companies in Nigeria pre and post adoption of IFRS16 by revealing the core trends, variability, and distribution of the variables (IFRS 16). These statistical measurements serve as the foundation for an in-depth analysis and hypothesis testing, allowing for comprehension of the study's results.

The offered descriptive data in Table 1 provide useful insight into the major measures of relevance to the study. Ratios such as Debt to Capital (DC), Return on Asset (ROA), and Current Ratio (CR) as well as the log values of: Right-of-use Asset (ROU), Interest Expense (IE), Lease Liability (LL), and log value of Depreciation of ROU Asset (DROU) are displayed in Table 1. First, it is important to note that the mean values of these variables fluctuate, which reflects their diversity. The average debt-to-equity ratio (DC) is roughly 1.041, indicating a conservative capital structure, which may be suggestive of financial stability. On the other hand, the mean of variables associated with the adoption of IFRS 16, such as Right-of-use Asset (ROU), Interest Expense (IE), Lease Liability (LL), and Depreciation of ROU Asset (DROU), are significantly higher, likely as a result of the impact of this accounting standard on these aspects of financial reporting.

Secondly, the very large standard deviations for the IFRS 16-related variables (ROU, IE, LL, and DROU) indicate a wide variation in the data, which reflects variances in how companies have implemented and reported under IFRS 16. Moreover, the positive skewness of Debt to Capital (DC) indicates a right-skewed distribution, indicating that many companies have lower debt-to-capital ratios, consistent with standard financial practices. In contrast, the skewness of the IFRS 16-related variables is near to zero, suggesting more symmetric distributions.

In addition, the high kurtosis for Return on Asset (ROA) indicates the possibility of outliers in this variable, which may need more analysis. The Jarque-Bera normality tests demonstrate that the vast majority of variables do not adhere to a normal distribution, emphasizing the necessity for adequate statistical approaches for this investigation. In the statistics, the study's emphasis on pre- and post-IFRS 16 adoption is especially clear. The descriptive statistics give a foundational knowledge of the variance and properties of these variables, which is necessary for the future testing of hypotheses. The larger means and standard deviations of associated variables, which indicate a shift in financial reporting procedures, may show that the introduction of IFRS 16 has really brought about considerable changes. These insights provide a full knowledge of the effect of the adoption of IFRS 16 on the financial performance of the chosen manufacturing companies in Nigeria by laying the groundwork for further research and interpretation of the hypotheses presented.

4.2 Correlation Matrix

The correlation matrix gives vital insight into the correlation's intensity and direction of these relationships. Table 2 presents the effect of the adoption of IFRS 16 on Debt to Capital (DC), Right-of-use Asset (ROU), Interest Expense (IE), Lease Liability (LL), Depreciation of ROU Asset (DROU), Return on Asset (ROA), and Current Ratio (CR) on a sample of manufacturing companies in Nigeria.

Table II: Correlation matrix

	DC	ROU	IE	LL	DROU	ROA	CR
DC	1.000000						
ROU	-0.150905	1.000000					
IE	-0.283697	0.545950	1.000000				
LL	-0.036716	0.935580	0.518825	1.000000			
DROU	-0.350301	0.498479	0.973827	0.447163	1.000000		
ROA	0.106658	-0.157658	-0.224071	-0.052576	-0.280985	1.000000	

CR	-0.368888	-0.095922	-0.032990	-0.143505	-0.032253	-0.109118	1.00 000 0
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Key:DC – Debt to Capital, ROU – Right-of-use asset, IE – Interest Expense, LL – Lease Liability, DROU – Depreciation of Right-of-use asset, ROA – Return on Asset, CR – Current Ratio.

Source: Author's Computation (2023)

With the exception of ROA, all other factors in Table 2 indicate negative relationships with Debt to Capital (DC). This indicates that when DC grows, other variables tend to decrease. For example, there is a negative association between Right-of-use Asset (ROU) and debt-to-capital ratio, suggesting that firms with larger debt-to-capital ratios tend to declare lower ROU values, presumably reflecting a conservative approach to lease accounting under IFRS 16. Similar negative correlations are discovered between Debt-to-Capital Ratio (DCR) and Current Ratio (CR), indicating that larger debt-to-capital ratios are related with less short-term liquidity. In contrast, a robust positive association exists between ROU and Lease Liability (LL), which is predicted given that both variables are connected to the adoption of IFRS 16. The positive link between ROU and Interest Expense (IE) and strong positive correlation between IE and DROU is particularly noteworthy, indicating that as the value of the right-of-use assets increases, and its associated depreciation increases, so do the accompanying interest charges. Usually, the valuation of ROU assets under IFRS 16, is influenced by increasing interest rates hence the positive correlation. As interest rates rise, the discount rate used to calculate the present value of lease payments also increases.

In addition, the negative association between Debt to Capital (DC) and Return on Asset (ROA) suggests that organizations with greater debt ratios tend to generate poorer returns on their assets. This data may suggest a trade-off between leverage and profitability.

4.3 Test of Hypotheses

Hypothesis testing is a crucial component of this study. Through a systematic analysis of these assumptions, this study establishes the degree to which the adoption of IFRS 16 has impacted on profitability, leverage, and liquidity of a sample of manufacturing companies in Nigeria. The Eviews software version 22 was employed for data analysis. The Hausman test results conducted for each of the regression models had a p-value that is significant (that is <0.05). Hence, the fixed effects model is more appropriate to use than the random effect.

4.3.1 IFRS 16 adoption and corporate profitability

The regression analysis in Table 3 gives useful insights into the link between Return on Asset (ROA) and the adoption of IFRS 16 on a sample of manufacturing companies in Nigeria. The results show that Right-of-use Asset (ROU) has a positive coefficient of 0.602087 and a small standard error, demonstrating statistical significance. This implies that a rise in declared ROU values has a considerable positive influence on ROA, underlining the potential advantages of adopting IFRS 16 in these firms.

Interest Expense (IE) and Lease Liability (LL) play important roles as well. IE has a negative value of -0.032148, indicating that rising interest expenditure negatively impact ROA. With a value of -0.274228, LL indicates that lease liability has a negative impact on ROA, highlighting the significance of successfully managing these financial factors. The coefficient for Depreciation of ROU Asset (DROU) is near to zero, showing that it has a negligible effect on ROA, and its p-value is rather high, indicating that it is not statistically significant. The constant term (C) has a very significant positive influence on ROA, showing that there are other elements that contribute favorably to ROA but are not represented by the variables included in the model.

The R-squared value of 0.716796 reflects that about 72 percent of the variance in ROA is explained by the variables included in the model. Adjusting for the number of variables in the model, the adjusted R-squared yields a significantly lower result of 0.701787. The standard error of regression (S.E. of regression) shows the accuracy of the model's predictions, but the F-statistic and its corresponding p-value indicate the model's overall significance, which is very significant (p-value of 0.0000).

The regression findings in Table 3 give significant support for the hypotheses of this study. They emphasize the considerable effect of Right-of-use Asset (ROU), Interest Expense (IE), and Lease Liability (LL) on Return on Asset (ROA), indicating that the adoption of IFRS 16 has major implications for the profitability of manufacturing companies in Nigeria. The use of cross-section fixed effects acknowledges the distinctive qualities of each company. Overall, the model is strong and offers significant insights into the impact of IFRS 16 on ROA within the setting of this study.

Table III: Panel Regression

Dependent Variable: ROA
Method: Panel Least Squares
Sample: 2015 2022
Total panel (balanced) observations: 128

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROU	0.602087	0.071756	8.390717	0.0026
IE	-0.032148	0.004661	-6.896882	0.0540
LL	-0.274228	0.029770	-9.211395	0.0496
DROU	-0.000330	0.003488	-0.094535	0.9249
C	0.980999	0.005606	174.9756	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.716796	Mean dependent var	0.972218	
Adjusted R-squared	0.701787	S.D. dependent var	0.056930	
S.E. of regression	0.042914	Akaike info criterion	3.316646	
Sum squared resid	0.198892	Schwarz criterion	2.871017	
Log likelihood	232.2654	Hannan-Quinn criter.	3.135585	
F-statistic	6.079364	Durbin-Watson stat	1.614196	
Prob(F-statistic)	0.000000			

Key: ROU – Right-of-use asset, IE – Interest Expense, LL – Lease Liability, DROU – Depreciation of Right-of-use asset.

Source: Author's Computation (2023)

4.3.2 IFRS 16 adoption and corporate liquidity

The regression analysis in Table 4, gives insight into the link between IFRS 16 adoption and liquidity (measured using Current Ratio (CR)), on a sample of manufacturing companies in Nigeria. Notably, Right-of-use Asset (ROU) has a positive coefficient of 0.313378 and a small standard error, demonstrating statistical significance. This indicates that increasing reported ROU values have a positive impact on the company's current ratio, perhaps showing enhanced liquidity arising from the adoption of IFRS 16. Interest Expense (IE) also has a substantial influence, as shown by a coefficient of 0.003440 and a p-value that is statistically significant. This implies that greater interest expenditures relate to a higher current ratio, indicating that these charges may have a favorable impact on liquidity.

Lease Liability (LL), on the other hand, has a coefficient of 0.000975 and a p-value that is not statistically significant, suggesting that it has no meaningful influence on the current ratio in this context. Depreciation of ROU Asset (DROU) has a negative coefficient of -0.004146, indicating that it influences the current ratio adversely. Its statistically significant p-value supports this association, suggesting that increased depreciation charges associated with ROU assets result in a decline in the current ratio, which may have a detrimental impact on liquidity.

The constant term (C) is very significant, indicating the existence of unexplained factors with a positive influence on the current ratio that are not reflected by the included variables. Regarding the effects specification, the introduction of cross-section fixed effects (dummy variables) recognizes the existence of unobserved heterogeneity among cross-sections, indicating that the unique qualities of particular companies have a substantial impact on their present ratio. The R-squared value of 0.529855 shows that the specified model variables account for about 53% of the variance in the current ratio. Adjusting for the number of variables, the corrected R-squared value is marginally lower at 0.447144.

The standard error of regression indicates the accuracy of the model's predictions, but the F-statistic and its related p-value indicate that the model is highly significant overall (p-value of 0.0000). The regression findings give considerable insight into the implications of IFRS 16 adoption on the current ratio of selected manufacturing companies in Nigeria. Notably, Right-of-use Asset (ROU) and Interest Expense (IE) have statistically significant impacts on the current ratio, indicating that the adoption of IFRS 16 might result in improved liquidity.

Table IV: Panel Regression

Dependent Variable: CR
Method: Panel Least Squares
Sample: 2015 2022
Total panel (balanced) observations: 128

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROU	0.313378	0.102355	3.061676	0.0029
IE	0.003440	0.001499	2.295352	0.0236
LL	0.000975	0.001042	0.935760	0.3515
DROU	-0.004146	0.001549	-2.677101	0.0086
C	1.033329	0.002489	415.1685	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.529855	Mean dependent var	1.028177	
Adjusted R-squared	0.447144	S.D. dependent var	0.025622	
S.E. of regression	0.019051	Akaike info criterion	4.940782	
Sum squared resid	0.039198	Schwarz criterion	4.495152	
Log likelihood	336.2100	Hannan-Quinn criter.	4.759720	
F-statistic	6.406125	Durbin-Watson stat	1.905044	
Prob(F-statistic)	0.000000			

Key:ROU – Right-of-use asset, **IE** – Interest Expense, **LL** – Lease Liability, **DROU** – Depreciation of Right-of-use asset, **CR** – Current Ratio.

Source: Author's Computation (2023)

4.3.3 IFRS 16 adoption and corporate Leverage

The regression analysis in Table 5 displays the results of the effect of IFRS 16 adoption on the leverage (DC) of a sample of manufacturing companies in Nigeria. First, the Right-of-use Asset (ROU) has a positive correlation of 1.391698, while the p-value of 0.1033 indicates that this link is not statistically significant at the standard 0.05 threshold of significance. This suggests that reported ROU values may have a favorable but insignificant influence on debt to capital ratios, although further data may be required to corroborate this statistically.

Interest Expense (IE) has a coefficient of 1.689677 and a p-value of 0.0577, suggesting that it may have a positive influence on DC. Although the p-value is near to the significance level of 0.05, it indicates that greater interest expenditures relate to larger debt ratios. Lease Liability (LL) demonstrates statistical significance with a positive coefficient of 0.003979 and a p-value of 0.0399. This suggests that larger lease liabilities are positively related to debt to capital ratios, suggesting that the introduction of IFRS 16 may have led to an increase in these ratios, which may imply a greater dependence on leases for financing.

With a coefficient of 0.317142 and a p-value of 0.007, Depreciation of ROU Asset (DROU) is statistically significant. This shows that when ROU asset depreciation accelerates, debt-to-capital ratios also increase, indicating the possible financial ramifications of this accounting standard on capital structure. The constant component (C) shows a very significant positive effect on DC, indicating the existence of unobserved factors that contribute favorably to debt ratios in addition to the included variables.

The model has a large R-squared value of 0.863620, suggesting that the specified factors account for nearly 86% of the variance in DC. Despite the number of variables, the adjusted R-squared value remains strong at 0.822035. The standard error of regression (S.E. of regression) shows the accuracy of the model's predictions, whilst the F-statistic and its p-value (p-value of 0.0000) highlight the model's overall importance.

In conclusion, the regression findings give key insights into the implications of the adoption of IFRS 16 on the debt-to-capital ratios of the chosen manufacturing companies in Nigeria. Lease Liability and ROU asset appear as key debt ratio factors. Despite the fact that the link with Right-of-use Asset seems favorable, it lacks statistical significance

at the specified level of significance (5%). The results highlight the significant financial repercussions of the adoption of IFRS 16 on capital structure, especially about financing choices in these organizations.

Table V: Panel Regression

Dependent Variable: DC				
Method: Panel Least Squares				
Sample: 2015 2022				
Total panel (balanced) observations: 128				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROU	1.391698	0.825464	1.685957	0.1033
IE	1.689677	0.852421	1.982210	0.0577
LL	0.003979	0.001910	2.082994	0.0399
DROU	0.317142	0.090523	3.503431	0.0007
CR	1.049589	0.002997	350.1571	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.863620	Mean dependent var	1.041476	
Adjusted R-squared	0.822035	S.D. dependent var	0.043518	
S.E. of regression	0.022944	Akaike info criterion	4.568950	
Sum squared resid	0.056852	Schwarz criterion	4.123321	
Log likelihood	312.4128	Hannan-Quinn criter.	4.387889	
F-statistic	18.36271	Durbin-Watson stat	1.803515	
Prob(F-statistic)	0.000000			

Key:ROU – Right-of-use asset, **IE** – Interest Expense, **LL** – Lease Liability, **DROU** – Depreciation of Right-of-use asset, **CR** – Current Ratio.

Source: Author's Computation (2023)

5. Discussion

The results in the above Tables reflect p-values being less than the standard significance threshold of 0.05, hence the need to reject the null hypothesis (H_0). This implies that there are statistically significant variations in disclosure compliance, profitability, leverage, and liquidity pre and post adoption of IFRS 16. Therefore, the adoption of IFRS 16 has had a considerable influence on the financial performance of the selected manufacturing companies in Nigeria. In essence, that there are significant variations in profitability, leverage, and liquidity pre and post the adoption of IFRS 16 in selected manufacturing companies in Nigeria.

The reclassification of lease assets due to IFRS 16 leads to higher interest expenditures and depreciation costs, which has a negative impact on the profitability (ROA) of the company. This disagrees with the study of Hameed and Bello (2023), who found that the adoption of IFRS 16 has a significant positive relationship with profitability.

The categorization of lease obligations as finance leases has increased financial leverage. This agrees with studies of Eleonora and Nadya (2019) and Săcărin (2017) that the adoption of IFRS 16 results in a higher financial leverage due to the increase in liabilities. Higher leverage may provide greater access to cash for investment and development, but it can also pose hazards if a company is unable to pay its debt commitments as they become due.

The rise in lease obligations results because of the adoption of IFRS 16 which has an impact on firms' liquidity. This agrees with studies by Eleonora and Nadya (2019) and Săcărin (2017) that the adoption of IFRS 16 results in lower liquidity due to an increase in current liabilities.

6. Conclusion

This research has shed light on the considerable impact of the adoption of IFRS 16 on the financial performance of selected manufacturing companies in Nigeria between the period 2015-2022. IFRS 16 adoption influenced the categorization of leases, the large disparity in profitability highlights the necessity for these selected manufacturing companies to adjust their financial decisions while evaluating its consequences for investment choices. Moreover, the impact on leverage and liquidity highlight the need to efficiently manage capital structures to strike a balance between growth potential and financial dangers.

Therefore, it is recommended that companies continue to improve their financial reporting practices with respect to IFRS 16, reassess their capital structure to strike a balance between debt and equity, taking into account the reclassification of lease liabilities and closely monitor their liquidity positions so as to develop strategies to ensure they can meet short-term obligations without disruptions.

This study is restricted to listed companies in the manufacturing sector. Future studies could consider exploring industries in other sectors of the economy. A survey of the

implementation challenges would also create room for regulatory institutions and national standard setting bodies to suggest recommendations to the International Accounting Standards Board on measures to combat the observed challenges.

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