



THE IMPACT OF APPLYING THE IFRS 16 LEASE STANDARD ON THE FINANCIAL RATIOS OF ECONOMIC ENTITIES LISTED IN THE IRAQ STOCK EXCHANGE

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Article history:	Abstract:
<p>Received: 24th January 2024 Accepted: 14th March 2024</p>	<p>The importance of lease contracts has increased in the present time through leasing many economic units of their core assets in their activities as a source of financing. Lease contracts have witnessed increased interest from professional accounting organizations with the development of lease contracts, as a number of accounting standards related to the recognition, presentation, and disclosure of lease contracts have been issued. The IFRS 16 financial reporting standard is the latest of these standards, and one of its main objectives is to improve the quality of financial reporting for economic entities." This study aims to reveal the impact of implementing the IFRS 16 lease standard on financial ratios. The researcher selected external auditors working in major audit firms in Iraq, where the research was applied to companies listed on the Iraq Stock Exchange. The research concluded that the application of the IFRS 16 lease standard affects the financial ratios of companies listed on the Iraq Stock Exchange.</p>
<p>Keywords: IFRS 16, lease standard, financial ratios, economic entities listed, Stock Exchange.</p>	

INTRODUCTION:

The prevalence and evolution of leasing activity in the current era have increased due to the expansion and diversification of economic units, consequently increasing their need for flexible financing resources. Instead of units borrowing to own large capital assets, they can now lease these assets, as is the case with railways, large hotels, and airlines. As a result of this evolution in lease contracts, accounting entities were required to issue international standards. Special standards were issued for measuring, recognizing, and reporting lease contracts for lessees and lessors. IFRS 16 is the latest standard concerning lease contracts, addressing numerous issues and concerns that existed under previous accounting standards.

RESEARCH PROBLEM:

Accounting research on lease contract treatment highlights a contentious issue that has garnered significant debate recently. This is due to the fact that lease contracts represent one of the most critical sources of financing, allowing lessees to leverage off-balance-sheet financing, consequently obscuring the true assets and liabilities in the economic entity's balance sheet. This will impact the financial ratios of economic entities. In summary, the research problem can be encapsulated through the following questions:

1. Are there statistically significant differences in applying the lease standard in the return on assets ratio in economic units?
2. Are there statistically significant differences in applying the lease standard in the return on equity ratio in economic units?
3. Are there statistically significant differences in applying the lease standard in the debt to equity ratio in economic units?
4. Are there statistically significant differences in applying the lease standard in the inventory turnover ratio in economic units?
5. Are there statistically significant differences in applying the lease standard in the interest coverage ratio in economic units?
6. Are there statistically significant differences in applying the lease standard in the trading ratio in economic units?

RESEARCH OBJECTIVES:

The research aims to achieve the following objectives:

- Highlighting the importance of lease contracts as a financing resource for economic entities.
- Demonstrating the impact of implementing IFRS16 standard on the financial ratios of economic entities.
- Showing the benefits accruing to users of financial statements in applying the IFRS16 standard.



SIGNIFICANCE OF THE STUDY:

The significance of the research lies in identifying the most important solutions introduced by the lease standard to address the challenges of implementing the international standard IAS17, thereby resolving the distinction between finance leases and operating leases and limiting off-balance sheet financing. Its importance also lies in seeking to elucidate the extent of the impact of implementing the IFRS16 standard on the financial ratios of the economic entities under study.

RESEARCH HYPOTHESES

To answer the research questions, the following hypotheses can be formulated:

First Main Hypothesis: There are statistically significant differences in applying the IFRS 16 lease standard in the return on assets ratio in economic units.

Second Main Hypothesis: There are statistically significant differences in applying the IFRS 16 lease standard in the return on equity ratio in economic units.

Third Main Hypothesis: There are statistically significant differences in applying the IFRS 16 lease standard in the debt to assets ratio in economic units.

Fourth Main Hypothesis: There are statistically significant differences in applying the IFRS 16 lease standard in the inventory turnover rate in economic units.

Fifth Main Hypothesis: There are statistically significant differences in applying the IFRS 16 lease standard in the interest coverage ratio in economic units.

Sixth Main Hypothesis: There are statistically significant differences in applying the IFRS

THEORETICAL FRAMEWORK OF THE RESEARCH

First: The Concept and Nature of Lease Contracts

Accounting institutions, such as the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), have shown significant interest in accounting for lease contracts. The FASB, in its standard No. 13, defined a lease contract as "an agreement conveying the right to use property, plant, or equipment (land or depreciable assets or both) for a specific period, noting that service agreements are not considered lease agreements. Similarly, agreements that do not transfer the right to use assets and equipment from the lessor to the lessee are not treated as lease contracts. Conversely, agreements that transfer the right to use from the lessor to the lessee are treated as lease contracts" (Abdelraheem, 2021:193).

The International Accounting Standards Board (IASB) defines a lease as: "An agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time." It defines a finance lease as "a lease that transfers substantially all the risks and rewards incidental to ownership of an asset, whether or not legal ownership is transferred eventually" (2018:221 Alexandru).

In January 2016, the International Accounting Standards Board issued the IFRS 16 Lease standard, which becomes mandatory starting from January 1, 2019. A lease is defined as "an agreement, or part of an agreement, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration." A finance lease is described as "a lease that transfers substantially all the risks and rewards incidental to ownership of the underlying asset" (IFRSs 756.Part A: 2016). The new standard focuses on defining basic assets by recognizing all lease contracts in the lessee's financial statements, including finance leases related to all basic assets, excluding only short-term contracts of 12 months or less and contracts for non-core assets with low value (less than five thousand dollars) (Al-Dmour, 2018:17). These exceptions apply to new contracts that have not been extended or modified (2020:14 Abdulkarimovich).

Secondly, the impact of applying the lease standard on financial position and performance

Proving lease contracts as operational and not financial because it leads to: (2019:30 Bellandi)

- An increase in the amounts of short-term and long-term debts reported in the financial position statement.
- An increase in the total assets, especially fixed assets.
- A decrease in the value of income generated during the early periods of the lease contract has led to a decline in retained earnings.

The aforementioned reasons have a significant impact on the elements of the financial statements and consequently on the metrics of financial reporting preparation. An increase in short-term debts will affect liquidity ratios, while an increase in long-term debt amounts will raise the debt-to-equity ratio, thereby diminishing the economic unit's capacity to borrow or issue shares. Moreover, an increase in fixed assets will lead to a decrease in the return on investment on total assets. Consequently, the capitalization of leases faces strong opposition from many economic units on the grounds that capitalization will not impact cash flows whether accounting for leases as financing or



operating leases. Capitalization may violate lease contract terms and obligations (due to non-alignment of the contract's legal form with its economic substance), potentially affecting distributions and compensations paid to owners and managers if tied to income, thus negatively impacting the economic unit's value in financial markets. (2022:81 Balasim)

The researcher believes that the opposition of economic units may serve her interests in a specific aspect, which lies in obtaining financing from outside the budget. It has been previously noted that it represents an advantage for leasing as a source of financing, which is one of the main justifications that prompted the International Accounting Standards Board to issue the IFRS 16 standard to eliminate off-balance sheet financing due to its significant distortion of financial ratios and obscuring of accounting information users, negatively affecting the quality of financial reporting and deviating from the primary objectives of preparing general purpose financial statements, which is to provide useful information to decision-makers.

Thirdly: Impact on Information Characteristics:

The misclassification of lease contracts can be seen to affect the characteristics of accounting information as follows:-

❖ RELEVANCE

For information to be useful, it must be relevant to the needs of decision-makers. Information is considered relevant to users if it impacts the economic decisions they make by helping them evaluate past, current, and future events, or by enhancing or modifying previous evaluations. The underlying conflict between economic entities in their quest to circumvent the terms of lease contracts to present them as operating rather than financing leases, and the International Accounting Standards Board's efforts to fill the gaps in formulating a standard that overcomes the failures of previous standards regarding lease contracts, is, in fact, from the researcher's perspective, a struggle over the survival of accounting as a primary source of financial information about economic entities. This conflict strikes at the heart of the accounting system, which is to produce useful financial information for its users. (2018:1490 Beugelsdijk)

In this context, the essence lies not in the tangible material entity of the leased asset but in the right to use this asset and generate benefits for the economic unit and the economic unit's compliance with this concept in recognizing, measuring, presenting, and

disclosing lease contracts will lead to aligning the information presented in the financial statements and undoubtedly impact decision-making. Concealing the liabilities arising from a specific lease contract means providing misleading information to users. The outputs of the accounting system disclosed in the financial statements represent inputs for decision-making models by various users related to profitability and performance evaluation decisions, short and long-term liquidity, and the lease versus buy decision. The divergence in financial ratios and indicators of the economic unit when capitalizing lease contracts tends to favor adopting the IASB perspective and leads to producing useful information that provides decision-makers with a suitable information base enabling them to evaluate past, current, and future events. (Diaz,2017:301)

❖ Sincere Representation

Sincere representation means that information accurately represents financial transactions or any other events, understood to be represented or expected to be represented. In order for financial reports to represent economic phenomena with useful words and numbers, the information should not only represent appropriate financial phenomena but should sincerely represent the phenomena intended to be represented. To achieve this and ensure sincere representation, it must possess three characteristics: completeness, neutrality, and freedom from error. (2018:17 Duran)

The management of the economic unit's pursuit of not capitalizing lease contracts may improve profit figures, but conversely, it significantly impacts the sincerity and fairness of financial statements, showing bias in their preparation and favoritism towards management at the expense of other information users. Presenting a finance lease as an operating lease in the financial statements only creates difficulty for investors in conducting comparisons or what is known as comparative analysis between economic units, forcing some investors to estimate the extent of off-balance sheet commitments, which often turn out to be larger than reality (2021:1761 Freeman). Based on this, researchers believe that to achieve useful financial information about lease contracts, it is necessary to:

1. Clearly define the lease contract (the economic reality) and its nature (finance, operating) under clear and precisely defined terms of the approved standard, leaving little room for significant personal judgment.
2. Identify the information related to the contract and determine if it is appropriate and truthfully represents



the contract. If yes, it is adopted; if not, the process is repeated until reaching appropriate and truthfully represented information.

Fourthly: Presentation and disclosure under the lease standard

The standard includes several disclosures that the lessee must present in the financial statements or disclose in the additional explanations. The lessee is required to present the following:

(2019:91 Hairston)

- In the financial statements, including:
 - a. The right to use the leased asset separately from other assets or to include it within the same item that the leased asset should have been presented if owned.
 - b. Lease liabilities separate from other liabilities. If the lessee does not present the lease liabilities separately in the financial statements, they must be included with the items that include those liabilities in the financial statements.
- **In the income statement and comprehensive income**, interest expense on lease liabilities (representing one of the financing costs) is presented separately from depreciation.
- **In the cash flow statement**, lease payments are classified into three categories:
 - a. Cash payments for the principal portion of the lease liability (financing activities).
 - b. Cash payments for the interest portion of the lease liability, which can be classified as either operating activities or financing activities (based on the accounting policy of the economic entity).
 - c. Short-term lease payments, payments for low-value leased assets, and payments for variable lease agreements not included in the measurement of lease liabilities are classified outside operating activities. The following table summarizes the lessee's required lease disclosures:

Fifth: Impact of Applying the Lease Standard on Financial Ratios

The application of the lease standard can impact financial ratios in economic entities in general. The standard requires entities to record lease contracts as assets and liabilities on financial statements, thereby changing the calculation method of ratios. The impact depends on the nature and volume of lease contracts held by the entities and how the standard is implemented. Recording lease contracts as assets and

liabilities may lead to an increase in the value of assets and liabilities on financial statements, affecting financial performance indicators. For example, if companies heavily rely on lease contracts to utilize assets, applying the lease standard may result in increased lease costs and impact on return on assets. Recording lease contracts as assets and liabilities may also lead to an increase in assets and liabilities in the financial statements, thus affecting the return on assets. It is important for entities to assess the impact of the lease standard on their financial performance and ensure proper and systematic compliance with the standard. Entities may also seek advice from financial accounting experts for a more in-depth and tailored analysis of the standard's impact on their financial performance. However, it should be noted that the impact of IFRS 16 on the return on assets depends on the nature of the lease contracts held by companies and how the standard is implemented. Changes in the asset structure and the return generated on them may occur based on the recording of lease contracts as assets and liabilities. Overall, the standard's application affects the financing structure of economic units, as long-term lease obligations are recorded as "debts" in the financial statements. The structure of capital and overall financing of the company can be affected by various factors. This change in financing structure may impact the return on assets (2022:24 Hadryianska).

The standard requires units to recognize lease contracts as assets and liabilities in the financial statements. This new recognition may lead to a change in the capital structure and its impact on return on equity. The impact of applying the standard on return on equity depends on several factors, including the nature and volume of lease contracts held by the units and how the standard is implemented. The impact hinges on the extent of change in the capital structure and the overall unit performance results. The application of the lease standard affects financial reports and can result in changes in the financial statement structure of companies. This could potentially impact financial performance indicators, including return on equity. However, the impact of the standard varies from one company to another depending on the nature and size of the lease contracts and the accounting policies adopted (Jose, 2018:21).

The application of the lease standard affects the financial indicators of economic units in several ways (Laslo, 2019:782).

- Impact on the financial statement structure: Implementing the standard leads to a change in the way long-term lease obligations are recorded in the



financial statements. These obligations are recorded as "debts" in the financial statements, affecting the capital structure and overall financing of the company. This change in the financial statement structure may result in a change in ownership rights.

- Impact on economic valuation: The application of the standard affects the valuation of leased assets and lease costs. Recording leased assets in the financial statements may increase their value, thereby

affecting ownership rights. Asset valuation may be enhanced, consequently increasing the fair value of assets in the financial statements.

-Change in Financing Structure: Applying the standard can lead to a change in the company's financing structure. Long-term lease obligations are recorded as "debts" in the financial statements, potentially altering the distribution of ownership rights among various stakeholders.

Table 1: Analysis of the Expected Impacts of Lease Standard Application on Financial Ratios

The index	Basis of measurement	Calculation Equation	The expected standard effect	Clarification
Financial leverage	Ability to repay long-term debts	Liabilities / Equity	increase	To increase financial demands and expected decrease in property rights
Liquidity ratio	Liquidity	Current Assets / Current Liabilities	decrease	To increase current lease demands while no increase in current assets
Inventory turnover	Profitability	Sales / Total Assets	decrease	To recognize leased assets as part of total assets
Interest coverage	Long-term financial solvency	EBITDA / Interest Expense	depends on	Applying the standard will increase interest and the ratio depends on the rental portfolio
EBIT (Earnings Before Interest and Taxes)	Profitability	Various income methods excluding investment income and the effects of interest and taxes	increase	Because the depreciation expense that will be added is less than the rental expenses in off-balance sheet financing
EBITDA	Profitability	Earnings Before Interest, Taxes, Depreciation, and Amortization	increase	To exclude rental expenses from off-balance sheet

Source: (CPA Canada, 2021: 8)

The researcher observes that many economic entities that lease substantial assets for use in their operations, such as airlines leasing aircraft, traders leasing stores, railway companies, and others entering into numerous lease agreements as operating leases under IAS 17, may be affected. When applying the requirements of IFRS 16, the financial performance indicators of the entity will be significantly affected. The expansion of the lease contracts portfolio will further impact the financial performance indicators of the economic unit. Currently, these units are required to disclose details of lease contracts not included in the financial statements in accordance with IFRS 16, leading to the main change in transparency and comparability.

The Practical Aspect of the Research

The researcher in the current study adopted the descriptive-analytical approach, utilizing factual information extracted from the financial statements of the research sample of Iraqi companies listed on the Iraq Stock Exchange for the years 2017-2021.

RESEARCH POPULATION

The research population consists of Iraqi economic units listed on the Iraq Stock Exchange, totaling 72 companies.

Second: Research Sample

The researcher studied all the published financial statements of the Iraqi joint-stock entities listed on the Iraq Stock Exchange, totaling (72) companies. The researcher found that the number of companies that



disclosed their lease contracts amounted to (37) companies. Thus, the study sample consists of only (37) companies.

Third: Research Tool

To achieve the research objectives and test its hypotheses, the researcher relied on using companies' financial statements as a research tool.

Fourth: Statistical Analysis Methods

To test the research hypotheses and answer its questions, the One-Sample Kolmogorov-Smirnov Test statistical method was employed.

Fifth: Descriptive Tests for Research Variables

1. Return on Assets

This financial indicator illustrates the returns generated by the research sample companies from asset utilization. Therefore, the current research sought to identify the return rates on assets for the period between (2017-2021) before and after the application of IFRS16 standard, along with the extent of change that occurred and return on assets is calculated by the following formula:

$$\text{Return on Assets} = \frac{\text{(Tax and Interest after Net Profit)}}{\text{Total Assets}}$$

Table 2: Descriptive Analysis of Return on Assets Before and After Applying IFRS16 Standard (Million Dinars)

Year	Return on assets before IFRS16 implementation	Return on assets after IFRS16 implementation	Change amount
2017	$0.16 = \frac{12754233}{81544768}$	$0.15 = \frac{12458159}{82498731.8}$	-0.01
2018	$0.15 = \frac{12253465}{80137371}$	$0.154 = \frac{12451338}{80852843.9}$	0.004
2019	$0.173 = \frac{13543721}{77873724}$	$0.176 = \frac{13752347}{78350705.9}$	0.003
2020	$0.167 = \frac{13915742.6}{83327800}$	$0.174 = \frac{14540534.6}{83566291}$	0.007
2021	$0.156 = \frac{13681412.9}{87701365}$	$0.164 = \frac{14383023.9}{87701365}$	0.008

Table (2) illustrates the return on assets before and after the application of the lease standard IFRS16, along with the amount of change in the return. It can be observed that in the year 2017, there is a decrease in the return on assets after the application of the standard due to it being the first year of implementing the lease standard. Consequently, the value of lease contracts is higher compared to subsequent years, leading to a significant increase in total assets compared to later years. Additionally, in this year, the value of interest on lease liabilities, plus the value of the right-of-use asset depreciation, exceeds the lease payment. As a result, the profits of the sample companies decrease in the first year of implementing the IFRS16 standard. While there has been an increase in the return on assets for the period between (2018-2021), this is due to the gradual decrease in the value of lease contracts during these years.

Consequently, the increase in total assets began to decline. Additionally, the interest on lease liabilities, plus the value of depreciation, has gradually decreased and has become lower than the lease payment.

2.Return on Equity

This indicator refers to the amount that companies have generated in returns from utilizing internal sources of financing represented by equity. Therefore, the researchers in the current study identified the return on equity before applying the IFRS 16 lease standard and after its application for the period between (2017-2021), in addition to the amount of change in the return.

The return on equity is calculated as follows:

$$\text{Return on Equity} = \frac{\text{(Tax and interest after net profit)}}{\text{Total equity}}$$

Table 3: Descriptive Analysis of Return on Equity Before and After Applying IFRS16 Standard (Million Dinars)

Year	Return on equity before IFRS16 implementation	Return on equity after IFRS16 implementation	Change amount
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2017	$0.625 = \frac{12754233}{20386192}$	$0.612 = \frac{12458159}{20331349.2}$	-0.013
2018	$0.611 = \frac{12253465}{20034342.7}$	$0.623 = \frac{12451338}{19988715.2}$	0.012
2019	$0.697 = \frac{13543721}{19408431}$	$0.710 = \frac{13752347}{19379228.1}$	0.013
2020	$0.670 = \frac{13915742.6}{20781950}$	$0.700 = \frac{14540534.6}{20769945}$	0.030
2021	$0.624 = \frac{13681412.9}{21925341.2}$	$0.656 = \frac{14383023.9}{21925341.2}$	0.032

Table 3 illustrates the return on equity for the sample companies before and after the implementation of the IFRS16 lease standard during the period from 2017 to 2021, along with the magnitude of the change. The change rate for the return on equity was (-0.013%), showing a negative impact, indicating that the standard reduced the return on equity in the first year. This reduction was due to the interest on lease liabilities being higher, including the depreciation expense, outweighing the lease payment, thus leading to a more significant profit reduction compared to subsequent years. However, the results in the table reveal that the return on equity increased during the period from 2018 to 2021. This increase post-implementation of the standard was attributed to a gradual decrease in interest rates, consequently boosting the profits of the sample companies and thereby increasing the return on equity. It is noted that the highest return achieved by companies was in

the last year of the contracts, which is the year (2021). The reason is that the right-of-use asset was (zero), thus the total ownership right account was equal before and after applying the standard. Calculating the interest resulted in the lowest possible, leading to a significant increase in the return on ownership right in the last year.

3. Debt to Assets Ratio

The debt to assets ratio indicates the extent to which companies rely on debt to finance their assets, or how much they depend on external sources of funding. The researchers in the current study identified the debt to assets ratio for the sample companies for the period between (2017-2021) before and after the implementation of the lease standard IFRS16, and the amount of change that occurred. The debt to assets ratio can be calculated using the following equation:
 Debt to Assets Ratio = (Total Debt) / (Total Assets)

Table 4: Descriptive analysis of the debt to assets ratio for the sample study companies before and after the application of IFRS16 standard (million dinars)

Year	Debt to asset ratio before IFRS16 implementation	Debt to asset ratio after IFRS16 implementation	Change amount
2017	$0.750 = \frac{61158576}{81544768}$	$0.753 = \frac{62167382.6}{82498731.8}$	0.003
2018	$0.730 = \frac{60103028.3}{80137371}$	$0.753 = \frac{60904128.7}{80852843.9}$	0.023
2019	$0.723 = \frac{58405293}{77873724}$	$0.752 = \frac{58971477.8}{78350705.9}$	0.029
2020	$0.741 = \frac{62495850}{83327800}$	$0.769 = \frac{62796346}{83566291}$	0.028
2021	$0.750 = \frac{65776023.8}{87701365}$	$0.750 = \frac{65776023.8}{87701365}$	0.000

Table (4) shows the debt-to-assets ratio for the sample companies before and after the implementation of IFRS16 lease standard for the period between (2017-2021) and the percentage change. It can be noted that the application of IFRS16 standard contributed to an increase in the debt-to-assets ratios for the sample companies for the period between (2017-2021), with the change rate ranging

between (0.003-0.28). However, in the last year, there was no change in the debt-to-assets ratio due to the total debt being equal before and after the standard application, as the lease liabilities became zero in the last year, and the total assets also became equal before and after the standard application because the right-of-use assets became zero in the last year for lease contracts.



4. Inventory turnover ratio

These ratios are among the most comprehensive measures of efficiency as they provide an indicator of a company's ability to use its assets to generate revenue, that is, the productivity of these assets. The current research aims to identify the inventory

turnover ratio before and after the application of the IFRS16 lease standard and the magnitude of the change. The inventory turnover ratio is calculated by the following formula:

$$\text{Inventory turnover ratio} = (\text{Net sales}) / (\text{Total inventory})$$

Table 5: Descriptive analysis of inventory turnover ratio before and after the application of the IFRS16 lease standard (in million dinars)

Year	Asset turnover rate before IFRS16 implementation	Asset turnover rate after IFRS16 implementation	Change amount
2017	$0.558 = \frac{45501980.5}{81544768}$	$0.551 = \frac{45501980.5}{82498731.8}$	-0.007
2018	$0.620 = \frac{49685170}{80137371}$	$0.614 = \frac{49685170}{80852843.9}$	-0.006
2019	$0.583 = \frac{45400381.1}{77873724}$	$0.579 = \frac{45400381.1}{78350705.9}$	-0.004
2020	$0.681 = \frac{56746231.8}{83327800}$	$0.679 = \frac{56746231.8}{83566291}$	-0.002
2021	$0.594 = \frac{52094610.8}{87701365}$	$0.594 = \frac{52094610.8}{87701365}$	0.000

Table (5) illustrates the inventory turnover ratio for the sample companies before and after the application of the IFRS16 lease standard for the period between (2017-2021) and the related change. It is noted that the inventory turnover ratio decreased after the application of the lease standard due to the increase in total inventory after the standard application, where the rate of change was between (-0.007% - 0.002%) for the period between (2017-2020), during the last year, 2021, the average change rate of asset rotation was (zero) due to the equality of assets' totals before and after applying the IFRS16 standard.

5. The interest coverage ratio

The interest coverage ratio indicates companies' ability to pay interest on their loans from their realized profits. If the ratio is greater than 1.1, it means that the company is able to pay the interest on its loans. Therefore, the current research aims to identify the interest coverage ratio for the sample companies before and after applying the IFRS16 lease standard and the percentage of change. The interest coverage ratio is calculated by the following equation:

$$\text{Interest Coverage Ratio} = (\text{Interest, taxes, depreciation, and amortization before profits}) / (\text{Interest expense}).$$

Table 6: Descriptive analysis of interest coverage ratio before and after applying the IFRS16 lease standard (in million dinars).

Year	Interest coverage ratio before IFRS16 implementation	Interest coverage ratio after IFRS16 implementation	Change amount
2017	$2.7 = \frac{18220332.9}{6748271.44}$	$2.64 = \frac{18220332.9}{6904483.02}$	-0.1
2018	$2.3 = \frac{18851484.6}{8196297.65}$	$2.26 = \frac{18851484.6}{8328451.31}$	-0.04
2019	$3.4 = \frac{22572868.3}{6639078.91}$	$3.347 = \frac{22572868.3}{6744023.07}$	-0.053
2020	$3.1 = \frac{21743347.8}{7013983.16}$	$3.067 = \frac{21743347.8}{7088153.37}$	-0.033
2021	$2.9 = \frac{19828134.6}{6837287.79}$	$2.883 = \frac{19828134.6}{6876652.66}$	-0.017



Table (6) shows the interest coverage ratio for the sample companies before and after applying the IFRS16 lease standard for the period between (2017-2021) and the amount of change resulting from the standard application. It is noted that the application of the standard contributed to reducing the interest coverage ratio for the period (2017-2021) where the ratio was between (-0.1-0.17-) and the reason for the decrease in the ratio is that the interest expense after applying the standard will increase, thus the interest coverage ratio will decrease, while the net profit before interest, taxes, and depreciation remains the same before and after applying the standard because it is not affected by the standard application.

6. Trading ratio

This ratio is one of the oldest and most widely used financial ratios, and it is used as a key standard to assess companies' ability to meet their short-term obligations from their current assets. Therefore, the current research aimed to identify the trading ratio before and after applying the IFRS16 lease standard for the sample companies and the amount of change that occurred. The trading ratio is calculated using the following equation: -

$$\text{Trading Ratio} = (\text{Current Assets}) / (\text{Current Liabilities})$$

Table 7: Descriptive analysis of the trading ratio before and after the application of IFRS 16 lease standard (million dinars)

Year	Trading ratio before IFRS16 implementation	Trading ratio after IFRS16 implementation	Change amount
2017	1.333 = $\frac{32617907.2}{24463430.4}$	1.333 = $\frac{32617907.2}{24463430.4}$	0.000
2018	1.126 = $\frac{30452202}{27046362.7}$	1.126 = $\frac{30452202}{27046362.7}$	0.000
2019	1.703 = $\frac{35821913}{21025905.5}$	1.703 = $\frac{35821913}{21025905.5}$	0.000
2020	1.333 = $\frac{38330788}{28748091}$	1.333 = $\frac{38330788}{28748091}$	0.000
2021	1.171 = $\frac{31572491.4}{26968169.8}$	1.171 = $\frac{31572491.4}{26968169.8}$	0.000

Table (7) shows the trading ratio for the sample companies before and after the application of IFRS 16 lease standard for the period between (2017-2021) and the amount of change in it. It can be inferred from the results of the previous table that the trading ratio was not affected by the application of the standard because the current assets were not affected by the application of the standard. This inference is also supported by the fact that the trading ratio was

not affected by the application of the standard because the current assets were not affected by the application of the standard, as the right-of-use assets are classified alongside the fixed assets, so their value did not change. The same applies to the current liabilities, as they were not affected by the application of the standard because the lease liabilities are classified alongside the long-term liabilities.

Sixth: Testing Research Hypotheses

Table 8: Results of One-Sample Kolmogorov-Smirnov Test

year	The statement	Value Z	Relative importance Sig
2017	Return on assets	0.501	0.020
	Return on equity	0.482	0.022
	Debt to assets ratio	0.521	0.032



	Inventory turnover ratio	0.503	0.020
	Interest coverage ratio	0.353	0.002
	Trading ratio	0.513	0.031
2018	Return on assets	0.501	0.010
	Return on equity	0.454	0.013
	Debt to assets ratio	0.529	0.006
	Inventory turnover ratio	0.506	0.010
	Interest coverage ratio	0.529	0.04
	Trading ratio	0.509	0.005
2019	Return on assets	0.511	0.002
	Return on equity	0.473	0.001
	Debt to assets ratio	0.529	0.010
	Inventory turnover ratio	0.505	0.005
	Interest coverage ratio	0.501	0.043
	Trading ratio	0.522	0.011
2020	Return on assets	0.599	0.032
	Return on equity	0.466	0.031
	Debt to asset ratio	0.505	0.041
	Inventory turnover ratio	0.513	0.032
	Interest coverage ratio	0.502	0.032
	Trading ratio	0.542	0.002
2021	Return on assets	0.520	0.001
	Return on equity	0.467	0.004
	Debt to asset ratio	0.521	0.001
	Inventory turnover ratio	0.515	0.004
	Interest coverage ratio	0.506	0.002
	Trading ratio	0.516	0.005

H1: There are statistically significant differences in applying the IFRS16 lease standard on asset returns in Iraqi joint-stock companies.

The current research used the One-Sample Kolmogorov-Smirnov Test to test the first hypothesis, where the aim of this hypothesis is to determine the impact of applying IFRS16 on the asset return ratio in Iraqi joint-stock companies. The research sample covers the period from 2017 to 2021, and the test revealed statistically significant differences in applying

the lease standard for the years 2017-2021, which help increase the asset return ratio in Iraqi joint-stock companies in the research sample.

H2: There are statistically significant differences in the application of the IFRS16 lease standard on the return on equity in Iraqi joint-stock companies.

The second hypothesis focuses on the impact of applying the IFRS16 lease standard on the return on equity in Iraqi joint-stock companies for the period (2017-2021), and the previous table shows the



results of the One-Sample Kolmogorov-Smirnov Test, where the significance level was less than (0.05) indicating positive differences in applying the lease standard in increasing the return on equity in Iraqi joint-stock companies.

H3: There are statistically significant differences in the application of the IFRS16 lease standard in the debt-to-assets ratio in Iraqi joint-stock companies.

This hypothesis aims to determine the impact resulting from the application of IFRS16 standard on lease contracts on the debt to asset ratio of Iraqi joint-stock companies for the period (2017-2021). Based on the results of the One-Sample Kolmogorov-Smirnov Test, as shown in the previous table, it is inferred that the level of significance was lower than the significance level relied upon in the current research as a decision rule (0.05) for the period between (2017-2021). This indicates the presence of statistically significant differences in the impact of IFRS16 standard on increasing the debt to asset ratio in Iraqi joint-stock companies in the study sample.

H4: There are statistically significant differences in the application of IFRS16 lease standard on the inventory turnover rate in Iraqi joint-stock companies.

The fourth hypothesis aims to explain the impact on the inventory turnover rate as a result of applying the IFRS16 lease standard in Iraqi joint-stock companies for the period (2017-2021). We can infer from the results of the One-Sample Kolmogorov-Smirnov Test that the significance level was lower than the study's significance level (0.005) for the period (2017-2021). This means that there are statistically significant differences due to the application of the IFRS16 standard on the inventory turnover rate in Iraqi joint-stock companies.

H5: There are statistically significant differences in the application of the IFRS16 lease standard in the interest coverage ratio in Iraqi joint-stock companies.

This hypothesis focuses on explaining the extent to which the application of the IFRS16 lease standard contributes to the interest coverage ratio for Iraqi joint-stock companies in the research sample for the period from (2017-2021). After applying the One-Sample Kolmogorov-Smirnov Test, as shown in the previous table, it is evident that the significance level is lower than the significance level (0.05), this means that there are statistically significant differences as a result of applying the IFRS16 standard on interest coverage ratio in Iraqi joint-stock companies for the period from (2017-2021).

H6: There are statistically significant differences in the application of the lease standard IFRS16 on the trading ratio in Iraqi joint-stock companies.

This hypothesis aims to determine whether there is an impact due to the application of the IFRS16 lease standard on the trading ratio in Iraqi joint-stock companies for the period between (2017-2021), and when applying the One-Sample Kolmogorov-Smirnov Test, it was found that the significance level of the test is less than the significance level (0.05), indicating that there are statistically significant differences in the trading ratio in Iraqi joint-stock companies, the research sample as a result of applying the IFRS16 lease standard.

CONCLUSIONS

1. There are statistically significant differences in applying the lease standard for the years 2017-2021 that help increase the return on assets in Iraqi joint-stock companies in the research sample.
2. There are positive differences in applying the lease standard in increasing the return on equity in Iraqi joint-stock companies.
3. There are statistically significant differences in the role of IFRS16 standard in increasing the debt to assets ratio in Iraqi joint-stock companies in the research sample.
4. There are statistically significant differences due to the application of the IFRS16 standard on the inventory turnover rate in Iraqi joint-stock companies.
5. There are statistically significant differences due to the application of the IFRS16 standard on the interest coverage ratio in Iraqi joint-stock companies for the period 2017-2021.
6. There are statistically significant differences in the trading ratio in Iraqi joint-stock companies in the research sample as a result of applying the lease standard IFRS16.

RECOMMENDATIONS

1. Economic units should apply lease financing and present the right to use existing assets, and lease contract requirements should be included in the financial statements separately from other items or within the same item it would have been presented in if owned.
2. Develop and train accountants academically and practically to understand and use financial reporting standards by offering qualification courses for this purpose.
3. Encourage researchers to study international standards not applied in Iraq such as IFRS 15, IFRS 9,



and IFRS 5, which are related to accounting for lease contracts for lessors, in line with Iraq's direction to adopt international accounting standards.

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