

IFRS 16 LEASE DISCLOSURES AND FINANCIAL RATIOS: A COMPARATIVE STUDY OF AVIATION AND TELECOM COMPANIES IN INDIA

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Abstract

The implementation of IFRS 16 has significantly transformed lease accounting by requiring lessees to recognize most leases on the balance sheet, thus enhancing transparency and also impacting key financial metrics. This study investigates the extent and nature of lease-related disclosures under IFRS 16 and their influence on financial ratios among selected aviation and telecom companies in India (Interglobal Aviation Ltd and Bharti Airtel Ltd). A comprehensive disclosure checklist is developed and adherence to mandatory requirements is assessed using financial statements. The study also evaluates the influence of these mandatory requirements on financial performance indicators such as asset turnover ratio, debt to equity ratio and interest coverage ratio. The findings suggest that both companies have either fully or mostly disclosed the necessary information as per the standard. It is also observed that IND AS 116 adoptions had no statistically significant impact on any of the related financial ratios for either company and hence to sectors that have large leasing assets.

Keywords:- IFRS Convergence, Lease Accounting, Aviation Companies, Telecom Companies, IGAAP.

The global financial landscape underwent a significant transformation with the introduction of International Financial Reporting Standard (IFRS) 16, Leases, effective for periods beginning on or after January 1, 2019. In India,

this standard was adopted as Indian Accounting Standard (Ind AS) 116, bringing about a fundamental shift in lease accounting by largely eliminating the distinction between operating and finance leases for lessees.

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The core tenet of IFRS 16/Ind AS 116 is to ensure that virtually all leases are recognized on the balance sheet as a “right-of-use” (ROU) asset and a corresponding lease liability, thereby providing a more faithful representation of a company’s financial position and obligations (Deloitte, 2016). This paradigm shift was primarily aimed at enhancing transparency and comparability across industries, addressing concerns that off-balance sheet operating leases obscured true financial leverage and asset utilization. The implementation of IFRS 16 had a profound and varied impact across different sectors, particularly those with significant lease portfolios. Industries such as aviation and telecommunications, characterized by their heavy reliance on leased assets like aircraft, cell towers, and network equipment, have experienced substantial changes to their financial statements (PwC, 2016). The capitalization of these previously off-balance sheet operating leases has led to notable increases in reported assets and liabilities, consequently affecting key financial ratios and potentially altering how companies are perceived by investors, creditors, and other stakeholders. Understanding the extent of these changes is crucial for accurate financial analysis and decision-making in the post-IFRS 16 era. This study, therefore, aims to ascertain whether the adoption of IFRS 16 primarily represents a change in the way financial items are presented, or if it has, in fact, brought about significant changes in critical financial metrics.

Significance of the Study

This study holds considerable significance for multiple stakeholders engaged in business landscape. For

investors and analysts, it demonstrates that IFRS 16 adoption primarily represents a reclassification rather than a fundamental change in financial health, enabling more informed interpretation of financial statements. The comprehensive disclosure checklist guides the corporate management to ensure better quality reporting in lease -intensive sectors. It also provides empirical evidence to the regulatory bodies to enhance practical effectiveness for lease accounting. The study also addresses the sector - specific gap in implementation of IFRS 16 in Indian context.

Statement of the Problem

The implementation of lease accounting in 2019 fundamentally transformed lease accounting by requiring lessees to recognize most leases on the balance sheet, eliminating the distinction between operating and finance leases. This change has critical implications for lease-intensive sectors like aviation and telecommunications, where substantial operating leases were previously off-balance sheet. Despite the standard’s mandate for enhanced transparency, significant uncertainty exists regarding the actual compliance levels and disclosure quality among Indian companies. Furthermore, while IFRS 16 brings substantial changes to financial statement presentation through recognition of right-of-use assets and lease liabilities, it remains unclear whether these changes represent mere reclassification or result in material impacts on key financial performance indicators. This study addresses these gaps by systematically evaluating disclosure compliance using a comprehensive checklist framework and examining the

statistical significance of changes in critical financial ratios following IFRS 16 implementation in selected aviation and telecommunications companies in India.

Objectives of the Study

- To develop a comprehensive checklist framework and assess the level of IFRS 16 lease-related disclosures among aviation and telecommunications companies in India.
- To analyze the impact of Ind AS 116 lease accounting implementations on key financial ratios, with specific focus on Asset Turnover Ratio, Interest Coverage Ratio and Debt Equity Ratio.

Scope of the Study

This study investigates the extent and nature of lease-related disclosures under IFRS 16 and their influence on financial ratios among two lease-intensive sectors - aviation and telecommunications - represented by IndiGo Aviation Limited and Bharti Airtel Limited. A ten-year period from 2014-15 to 2023-24, allowing comparison of five years pre-implementation and five years post-implementation data were considered. The disclosure quality is analysed by employing a comprehensive 26 - item checklist based on IFRS 16 requirements and examined three key financial ratios; Asset Turnover Ratio, Debt-to-Equity Ratio, and Interest Coverage Ratio. The study focuses exclusively on large-cap, listed companies in India.

Literature Review

The global adoption of International Financial Reporting Standards (IFRS) has aimed to bring consistency, transparency,

and comparability to financial reporting across industries. IFRS 6, specifically tailored for extractive industries, was intended to harmonize accounting practices in areas such as exploration and evaluation of mineral resources. However, studies indicate that compliance levels are varied and often inadequate. Abdo (2016) found only limited success in harmonization across global extractive firms, with varying accounting treatments creating challenges in comparability. Similarly, Poswal and Chauhan (2021) conducted a checklist-based content analysis of leading Indian and global oil and gas firms and concluded that average compliance with IFRS 6 was below 45 per cent, raising concerns about effective enforcement and universality of application. These studies suggest the utility of structured checklists to pinpoint areas of non-compliance, making them a valuable tool for analyzing IFRS adherence. In the context of IFRS 16 - particularly relevant for lease-heavy sectors like aviation and telecommunications - the literature highlights significant shifts in financial reporting. Morales-Díaz and Zamora-Ramírez (2018) and Liviu-Alexandru (2018) demonstrate that IFRS 16 eliminates off-balance sheet lease treatments, significantly impacting leverage ratios and financial indicators. In India, Mathew (2023) examined the implementation of IFRS 16 within the airline industry and noted pronounced changes in EBITDA and total liabilities post-adoption, especially for companies such as Indigo Ltd. Despite regulatory convergence efforts, Sambaru and Kavitha (2014) emphasize that Indian standards are still evolving to fully align with IFRS norms. These findings underscore the necessity of

a sector-specific compliance checklist, particularly for lease-intensive industries, to evaluate the actual extent of IFRS 16 implementation and its implications for financial transparency and stakeholder confidence.

Research has established that IFRS 16 disclosure requirements aim to provide users with comprehensive information about an entity's leasing activities, requiring both qualitative and quantitative disclosures to assess the effect of leases on financial position, performance, and cash flows (Grant Thornton, 2019). However, compliance studies reveal considerable variation in disclosure quality and completeness. A notable study documented that the average compliance score with IFRS 16 mandatory presentation and disclosure requirements was only 58.72 per cent, with scores ranging from 15 per cent to 83 per cent, indicating significant room for improvement in disclosure practices (Compliance study, 2021). The literature emphasizes that while IFRS 16 offers illustrative disclosures, entities should focus on the disclosure objective rather than following a rigid checklist approach, suggesting the need for more comprehensive framework development for assessing disclosure quality (KPMG, 2019).

Research Methodology

This study employs a descriptive and quantitative research design utilizing content analysis to systematically evaluate IFRS 16 lease-related disclosures within the Indian aviation and telecommunications sectors. A quantitative methodology is adopted through the

development and application of a comprehensive disclosure checklist framework. Following the computation of disclosure index scores and verification of companies' adherence to IFRS 16 requirements, the study proceeds to evaluate the substantive influence of these reporting standards on corporate financial performance indicators. Financial ratios are systematically analyzed across a ten-year period, encompassing five years preceding IFRS 16 adoption (2014-15 to 2018-19) and five years subsequent to implementation (2019-20 to 2023-24). This temporal framework facilitates comprehensive assessment of the standard's impact on key financial metrics and enables robust comparative analysis of pre- and post-adoption financial performance patterns. The study employs a purposive sampling strategy to select representative entities from both sectors under investigation. The sampling criteria encompass: (i) active listing status on Indian stock exchanges, (ii) material lease obligations subject to IFRS 16 reporting requirements, (iii) availability of comprehensive annual reports for the financial year 2024-25, and (iv) Largest Company in each sector based on market capitalisation of that particular sector. Following the application of these selection criteria, two companies were identified through random sampling from the qualified population. InterGlobe Aviation Limited (IndiGo) serves as the representative entity for the aviation sector, while Bharti Airtel Limited represents the telecommunications sector. This dual-sector approach facilitates meaningful comparative analysis while ensuring sectoral diversity in the research sample.

The study relies exclusively on secondary data sources to ensure objectivity and replicability. Sources include official annual reports and financial statements obtained from company websites, supplemented by IFRS 16 standard guidelines, industry-specific reports, and relevant regulatory frameworks. The temporal scope encompasses financial data spanning a ten-year period (2014-15 to 2023-24), with particular emphasis on the implementation year of Ind AS 116 (equivalent to IFRS 16) in 2019-20.

Disclosure Index Construction

A comprehensive disclosure checklist was developed based on mandatory requirements stipulated in paragraphs 90-97 of IFRS 16. Total 26 items were included in the checklist list. Each disclosure item is evaluated using a three-point ordinal scale: 0 (not disclosed), 1 (partially disclosed), and 2 (fully disclosed). The overall disclosure quality is quantified using the following weighted disclosure index:

Disclosure Index (DI) =

$$\frac{(FD \times 3 + PD \times 2 + ND \times 1)}{(\text{Total Items} \times 3)}$$

Where: FD = Fully Disclosed items,
PD = Partially Disclosed items,
ND = Not Disclosed items.

Financial Ratio Analysis

Three key financial performance indicators selected are

1. Asset Turnover Ratio =

$$\text{Net Sales} \div \text{Average Total Assets}$$

2. Debt-to-Equity Ratio =

$$\text{Total Borrowings} \div (\text{Equity Capital} + \text{Reserves})$$

3. Interest Coverage Ratio =

$$\text{EBIT} \div \text{Interest Expense}$$

Where EBIT is calculated as Operating Profit plus Other Income.

The study employs paired t-tests to examine the statistical significance of changes in financial ratios following IFRS 16 implementation. The analysis compares financial performance metrics for two distinct periods: pre-implementation (2014-15 to 2018-19) and post-implementation (2019-20 to 2023-24). A significance level of $\alpha = 0.01$ (1%) is adopted.

Research Hypothesis

For Inter Globe Aviation Limited:

H_{1a} : There exists a statistically significant change in Asset Turnover Ratio following IFRS 16 implementation (2019-20 onwards)

H_{1b} : There exists a statistically significant change in Debt-to-Equity Ratio following IFRS 16 implementation (2019-20 onwards)

H_{1c} : There exists a statistically significant change in Interest Coverage Ratio following IFRS 16 implementation (2019-20 onwards)

For Bharti Airtel Limited:

H_{2a} : There exists a statistically significant change in Asset Turnover Ratio following IFRS 16 implementation (2019-20 onwards)

H_{2b}: There exists a statistically significant change in Debt-to-Equity Ratio following IFRS 16 implementation (2019-20 onwards)

H_{2c}: There exists a statistically significant change in Interest Coverage Ratio following IFRS 16 implementation (2019-20 onwards)

To ensure methodological rigor and credibility of findings, several measures were implemented to enhance validity and reliability. Content validity was established through systematic alignment of checklist items with specific IFRS 16 disclosure requirements, followed by expert validation of the analytical framework.

The use of audited financial statements from official corporate sources ensures data authenticity and reliability.

Data Analysis, Interpretation and Discussion

With both InterGlobe Aviation (IndiGo) and Bharti Airtel Limited achieving identical Disclosure Index scores of 0.949 (Table 1), the results indicate an exceptionally high and uniform level of compliance with IFRS 16 mandatory requirements across both the aviation and telecommunications sectors.

The longitudinal trend analysis (Table 2) reveals that the 2019-20

Table 1
Disclosure Index Score (Out of 1.00)

Company	Disclosure Index Score
Indigo Aviation Limited	0.949
Bharti Airtel Limited	0.949

Source: Computed

Table 2
Key Ratios of Indigo Aviation Limited and Bharti Airtel Limited for Last 10 years

Year	Indigo - Asset Turnover Ratio	Indigo - Debt to Equity Ratio	Indigo - Interest Coverage Ratio	Bharti Airtel Limited - Asset Turnover Ratio	Bharti Airtel Limited - Debt to Equity Ratio	Bharti Airtel Limited - Interest Coverage Ratio
2023-24	0.94	26.53-	4.43	0.53	2.10	7.56
2022-23	0.92	-7.11	2.51	0.47	1.51	3.97
2021-22	0.57	-6.11	0.54	0.42	1.59	3.70
2020-21	0.34	420.56	0.48	0.34	1.60	3.22
2019-20	0.85	3.87	2.94	0.31	1.76	2.43
2018-19	1.14	0.35	2.09	0.28	1.92	2.62
2017-18	1.09	0.35	9.63	0.29	2.76	3.00
2016-17	1.22	0.69	7.41	0.33	2.55	3.46
2015-16	1.28	1.19	10.51	0.35	2.91	3.69
2014-15	1.29	9.42	15.33	0.34	2.63	3.46

Source: Computed

implementation of IFRS 16 triggered significant structural shifts and volatility in Inter-Globe Aviation’s leverage and coverage metrics, whereas Bharti Airtel maintained a more stable financial profile with a consistent upward trajectory in asset efficiency throughout the ten-year period.

Statistical analysis of the financial ratios reveals that while IFRS 16 implementation led to notable shifts in mean values, particularly a sharp decline in interest coverage and a surge in leverage, these changes are not statistically significant at the 1% level, suggesting that observed variations may be influenced by

inherent sectoral volatility rather than the accounting transition alone.

Despite the implementation of IFRS 16, the paired t-test results for Bharti Airtel Limited indicate that the observed improvements in asset turnover and interest coverage, alongside the reduction in leverage, lack statistical significance at the 1% level, suggesting that the transition did not fundamentally alter the company’s financial performance profile.

The hypothesis testing results of both companies (Table 5) consistently fail to reject the null hypothesis across all metrics,

Table 3
Paired t-Test Results for Indigo Aviation Limited

Ratio	Before 2019-20 Mean (SD)	After 2019-20 Mean (SD)	Mean Difference	t-statistic	p-value	Significant at 1%
Asset Turnover Ratio	1.20 (0.08)	0.72 (0.23)	0.48	3.718	0.038	NO
Debt to Equity Ratio	2.40 (3.52)	87.55 (166.95)	-85.15	-1.136	0.522	NO
Interest Coverage Ratio	8.99 (4.31)	2.18 (1.51)	6.81	3.043	0.089	NO

Source: Computed

Table 4
Paired t-Test Results for Bharti Airtel Limited

Ratio	Before 2019-20 Mean (SD)	After 2019-20 Mean (SD)	Mean Difference	t-statistic	p-value	Significant at 1%
Asset Turnover Ratio	0.32 (0.03)	0.41 (0.08)	-0.10	-1.994	0.263	NO
Debt to Equity Ratio	2.55 (0.34)	1.71 (0.21)	0.84	3.503	0.050	NO
Interest Coverage Ratio	3.25 (0.38)	4.18 (1.77)	-0.93	-0.983	0.580	NO

Source: Computed

Table 5
Summary of Hypothesis Testing Results

Company	Ratio	Hypothesis	P-value	Decision	Hypothesis Supported
Indigo Aviation Limited	Asset Turnover Ratio	H _{1a}	0.038	Fail to Reject H ₀	NO
Indigo Aviation Limited	Debt to Equity Ratio	H _{1b}	0.522	Fail to Reject H ₀	NO
Indigo Aviation Limited	Interest Coverage Ratio	H _{1c}	0.089	Fail to Reject H ₀	NO
Bharti Airtel Limited	Asset Turnover Ratio	H _{2a}	0.263	Fail to Reject H ₀	NO
Bharti Airtel Limited	Debt to Equity Ratio	H _{2b}	0.050	Fail to Reject H ₀	NO
Bharti Airtel Limited	Interest Coverage Ratio	H _{2c}	0.580	Fail to Reject H ₀	NO

Source: Computed

confirming that the transition to IFRS 16 did not produce a statistically significant impact on key financial ratios.

Findings and Suggestion

- A disclosure score of 0.949 suggests very high compliance with the IFRS 16 lease disclosure requirements. Both companies have either fully or mostly disclosed the necessary information as per the standard.
- Such a high score supports the conclusion that both companies prioritise transparency, regulatory compliance, and corporate governance. On a detailed analysis of the disclosure, it came to know that both the companies do not present the leasing details in tabular form, which is the reason for not fulfilling complete 1 score.
- Based on the paired t-test results at 1% significance level, where all p-values exceed 0.01, none of the hypotheses are supported, indicating that IND AS 116 adoption had no statistically significant impact on any of the related financial ratios for either company and hence to sectors that have large leasing assets.
- Both the aviation and telecom industries, as represented by these large-cap companies, demonstrated complete resilience to the IND AS 116 transitions, with no material disruption to their core financial performance metrics despite the substantial changes in lease accounting treatment.
- The simultaneous recognition of right-of-use assets and lease liabilities under the new standard appears to have

created offsetting effects that maintained the relative stability of key financial ratios, particularly the debt-to-equity ratio where the increase in liabilities was balanced by the increase in asset base.

- Stakeholders should view the high Disclosure Index scores as a benchmark for transparency, while acknowledging that the transition to IFRS 16 did not cause a statistically significant disruption to the underlying financial performance of the sample companies. Regulators and analysts should therefore maintain focus on sector-specific operational variables, as the accounting shift appears to have been effectively absorbed without fundamentally altering corporate credit or efficiency profiles.

Conclusions

The study titled “*IFRS 16 Lease Disclosures and Financial Ratios: A Comparative Study of Aviation and Telecom Companies in India*” reveals that both IndiGo Aviation Limited and Bharti Airtel Limited achieved

identical and high disclosure index scores (0.949), indicating strong compliance with IFRS 16 and a commitment to financial reporting quality across sectors. This consistency suggests that industry type is not a major determinant of disclosure completeness among large, high-profile firms. Furthermore, the absence of significant shifts in key financial ratios post-implementation highlights that Ind AS 116 primarily resulted in a reclassification of lease-related items, rather than altering the core financial health or performance of the companies. The absence of significant changes across all financial ratios indicates that implementation of IFRS 16 represented primarily a reclassification and presentation change rather than a fundamental alteration in the underlying business economics or financial health of these companies. These findings imply that investors and analysts need not substantially revise their evaluation frameworks, and that the transition to international standards was executed smoothly, ensuring transparency without introducing distortions in reported financial metrics.

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