

Impact of depreciation accounting on financial health in telecommunication industry with reference to accounting standards and IFRS

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Abstract

This article examines the effects of depreciation accounting on the financial well-being of telecom firms, focusing on accounting standards and International Financial Reporting Standards (IFRS). There are major ramifications for financial reporting, performance assessment, and investment decision-making due to depreciation accounting's importance in representing the actual economic worth of assets. The choice of assumptions and procedures for depreciation may have a significant impact on financial statements and important financial indicators in the fast-paced and capital-intensive telecommunications industry, where new technologies quickly make assets outdated. The purpose of this research is to examine the telecom industry's depreciation accounting methods in light of various accounting rules and IFRS. It takes a look at how profitability, liquidity, solvency, and asset turnover are affected by different assumptions about residual value, useful life estimates, and depreciation procedures. Also discussed is how the openness and comparability of financial data among telecoms firms throughout the world are impacted by the degree to which certain accounting rules are followed or IFRS is adopted. Methods include a survey of the current literature, an examination of financial data from telecom companies, and a comparison of depreciation policies and the indices of financial health that they affect. The study's findings may help telecommunications businesses, regulators, investors, and others better grasp the intricacies of depreciation accounting and how they affect financial stability and performance. The results also add to the continuing discussion about accounting standard convergence and the need to standardise financial reporting across sectors and countries.

Keywords - Depreciation accounting, Financial health, Telecommunication industry, Accounting standards, International Financial Reporting Standards (IFRS)

Introduction

When it comes to expanding human connection and developing new technologies, the telecoms sector is at the forefront. Investors, regulators, and other stakeholders in the telecom business must comprehend the financial well-being of enterprises in this sector due to the industry's fast change and intense rivalry. Decreasing the cost of assets during their useful lifetimes is the complex field of depreciation accounting, which is essential for evaluating financial health. Profitability, liquidity, solvency, and operational efficiency are all seen differently once depreciation accounting has been applied to financial statements.

Within this framework, this paper thoroughly examines how depreciation accounting affects the financial well-being of telecom companies. It does so by providing a detailed examination of various depreciation methodologies and the consequences of using them in accordance with various accounting standards and IFRS. Because technology assets in the telecommunications industry are subject to fast obsolescence and capital expenditures are

high, the assumptions about residual value, useful life estimates, and depreciation methodologies used in financial reporting are crucial.

Examining the impact of IFRS adoption and variances in accounting standards on financial health indicators is the major goal of this research, which aims to compare depreciation accounting procedures throughout the telecoms sector. In order to shed light on how much depreciation accounting techniques impact important financial measures including profitability, liquidity, solvency, and asset turnover, this study aims to conduct empirical analysis and comparative review among telecommunications firms worldwide.

In addition, the purpose of this study is to explain how various depreciation accounting methods affect financial reporting clarity, comparability, and the capacity of investors to make informed decisions. This study aims to help telecommunications companies, regulators, investors, and others understand depreciation accounting and how it affects financial stability and performance by combining findings from previous research, analysis of empirical data, and comparisons.

This research adds to the current conversation about accounting standards coming together and financial reporting becoming more standardised by providing useful information about how depreciation affects the bottom lines of telecom companies in a world where competition is heating up and everyone is always online.

Literature review

The telecom sector has gone to great lengths to analyse and examine depreciation accounting, a crucial part of financial reporting. Depreciation methods in this ever-changing industry are accompanied by a variety of assumptions, approaches, and consequences, all of which may be uncovered in the literature.

The importance of depreciation accounting in representing the real economic worth of telecom assets has been emphasised in several studies. For example, in order to properly account for the value that declines with time, Smith et al. (2020) stress the need of coordinating depreciation techniques with the technical lifetime of assets. This is in line with what Johnson and Brown (2021) found, which highlights how fast technology obsolescence affects how telecoms businesses choose to depreciate their assets and value them.

In addition, the research has focused on comparing depreciation procedures under various accounting standards. Smith and Jones (2020) examine telecom companies' depreciation practices that follow either IFRS or GAAP, drawing attention to differences in residual value assumptions and useful life estimations. Similarly, Zhang et al. (2018) notes that there are variations in reporting standards and disclosure requirements as they investigate the effects of IFRS adoption on financial performance measures and depreciation accounting in the telecoms industry.

There are ramifications for financial reporting and, more generally, for financial health and performance assessment that have been associated with depreciation accounting procedures. The importance of open and uniform accounting standards in allowing for accurate performance evaluation is highlighted by Chen et al. (2018), who study the connection between depreciation methodologies and profitability measures. Research on the effects of depreciation policies on solvency and liquidity ratios has been conducted by Wang et al. (2019) and Lee and Kim (2018), which emphasises the need for careful asset management and allocation of capital methods to keep the economy stable.

The literature as a whole highlights the importance of depreciation accounting in financial reporting, performance appraisal, and investor decision-making, as well as its multidimensional character in the telecoms business. With an emphasis on comparative analysis under different accounting standards and IFRS adoption, this research aims to complete our understanding of the implications of depreciation accounting on the financial health of telecommunications firms by combining insights from existing studies.

Objectives of the study

- To analyze the depreciation accounting practices employed by telecommunications companies under different accounting standards, including Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).
- To evaluate the impact of varying depreciation methodologies, such as straight-line, declining balance, and units of production, on the financial statements and key financial metrics of telecommunications firms.

Hypothesis of the study

H0: There is no significant difference in the financial health indicators, including profitability, liquidity, solvency, and asset turnover ratios, between telecommunications companies employing different depreciation accounting methods.

H1: There is a significant difference in the financial health indicators between telecommunications companies employing different depreciation accounting methods.

Research methodology

Financial Data Collecting Information culled from records kept by telecommunications firms that are open to the public and that adhere to two sets of accounting rules (GAAP and IFRS). Companies with thorough and consistent financial reporting standards were chosen to assure data uniformity and dependability. An analysis of the depreciation accounting methodologies used by a subset of the telecommunications businesses was conducted. Method selection, useful life estimations, and residual value assumptions were all part of the depreciation policies that were checked for appropriateness and consistency.

To summarise the data distribution and core patterns of financial health indicators, a descriptive statistic was conducted. Applied inferential statistics like t-tests and ANOVA to test hypotheses about the variations in financial health indicators across groups of organisations using different depreciation accounting systems and standards. Using appropriate controls, we ran a regression study to see how depreciation accounting affected our financial performance metrics.

Data analysis and interpretation

Table 1. Financial ratios (total sample, n=19) before and after the implementation of IFRS 16 Depreciation: statistical significance of median and mean differences.

Variable	Mean Difference	Median Difference
Liability to Asset Pre IFRS-16 & post IFRS-16	Difference = -0.0421	Difference = -0.0456
	t = -7.5429	z = -4.618
	p-value < 0.001	p-value = 0.001
Leverage on Equity Pre IFRS-16 & post IFRS-16	Difference = -0.0147	Difference = -0.0129
	t = -6.3259	z = -4.598
	p-value = 0.001	p-value = 0.001

Interpretation

It seems that the firms analysed have reduced their levels of liabilities relative to assets and leverage on equity after adopting IFRS 16 standards, since both financial variables have negative mean and median differences. It is very improbable that these discrepancies happened at random, given the statistical significance shown by the low p-values in both instances.

Taken together, these results suggest that the examined firms' financial structures and leverage situations have been significantly affected by the adoption of IFRS 16, resulting in a reduction in their liabilities and leverage ratios. The impacted businesses and sectors may need to adjust their methods of financial reporting, risk assessment, and investment selection as a result of this.

Table 2. Ratios and their variations (before and after IFRS 16 depreciation was implemented, complete sample, n = 19): descriptive statistics.

Variable	Minimum	Maximum	Average	Quartile 1	Median	Quartile 3
Liability to Asset Pre IFRS-16 & post IFRS-16	0.4444	9.1818	2.5553	0.7368	1.0032	1.5976
	0.4516	9.2686	2.5945	0.7778	1.1388	1.6262
C.I./E [%]	0.00%	12.92%	4.19%	2.20%	4.65%	6.58%
Leverage on	0.36	0.9909	0.6153	0.495	0.5089	0.6084

Equity Pre IFRS-16 & post IFRS-16	0.365	0.9019	0.6254	0.5	0.6179	0.7128
CLL/A [%]	0.00%	7.37%	3.10%	0.48%	1.93%	3.09%

Liability to Asset: The data shows an increase in the average ratio of liabilities to assets after the implementation of IFRS 16, though the changes are within a narrow range. Both the pre and post IFRS-16 intervals have a broad range, indicating variability in the liability-to-asset ratios among the companies studied. The confidence intervals for both periods provide a range within which the true population parameter is likely to fall with 95% confidence.

Leverage on Equity: There is a slight increase in the average leverage on equity after the adoption of IFRS 16, along with a slight widening of the range. The confidence intervals for both periods are relatively narrow, suggesting a higher level of confidence in the estimated population parameter. Overall, while there are some shifts in the average values and ranges of the financial variables after the adoption of IFRS 16, the changes appear relatively moderate. The confidence intervals provide additional context, indicating the level of uncertainty associated with the estimated population parameters.

Discussion

The data shows that the average ratio of liabilities to assets increased somewhat after IFRS 16 was implemented. The study's enterprises may have seen a change in their capital structure, even if the change is minimal. Significant variation in the liability-to-asset ratios among the organisations analysed is shown by the broad range seen in both the pre- and post-IFRS 16 eras. Possible causes of this variation include various finance choices, capital spending methods, and company types. Importantly, the confidence intervals show how uncertain the calculated population parameters are, which is very helpful background information. The confidence intervals imply that the actual population parameter may still be within a rather large range, even if the average ratio has gone up.

Effect on Average Leverage on Equity: After IFRS 16 is implemented, the average leverage on equity goes up a little. It seems that corporations may have relied more on debt financing than equity once the new accounting requirements were put in place. A greater degree of confidence in the calculated population characteristics is shown by the smaller confidence intervals for leverage on equity compared to obligation to asset ratio. There seems to be some consistency in the observed changes in leverage on equity among the firms that were analysed. It should be mentioned that the firms analysed show a conservative approach to debt financing, as seen by the relatively moderate rise in leverage on equity.

The results indicate that the financial structures of the firms examined have been somewhat affected by the implementation of IFRS 16, but to a lesser extent than anticipated. New accounting rules may necessitate rethinking current financing methods and choices about the distribution of capital due to the rise in the obligation to asset ratio and leverage on equity.

Data variability, however, shows how varied the telecoms business is, with various firms showing varying degrees of susceptibility to the adjustments imposed by IFRS 16.

Future studies might investigate the causes of the observed shifts in financial variables, such as how changes to lease accounting affect debt levels and choices about capital expenditures. The telecoms sector may benefit from longitudinal studies that follow company financial performance over time to learn more about the effects of IFRS 16 adoption in the long run.

Conclusion

Several important conclusions were drawn from the examination of the effects of IFRS 16 adoption on the financial variables of the telecom industry's Liability to Asset ratio and Leverage on Equity: Modest Shifts in the Organisational Crypt: Companies surveyed saw a little uptick in their average leverage ratio and liability to asset ratio after IFRS 16 went into effect. The new accounting rules may cause a change in the capital structure and financing strategies of telecommunications enterprises, despite the fact that these changes are very small.

Companies' Levels of Variability: Companies in the telecoms sector have a wide variety of financial structures and business strategies, as shown by the large variation in both financial variables. The significance of taking into consideration specific firm goals and environments when analysing the effects of accounting changes on financial measures is shown by this heterogeneity. Accuracy of Predictions: By showing the degree of uncertainty linked with the observed changes, the confidence intervals provide helpful context for understanding the predicted population parameters. The wide confidence intervals imply that the actual population parameters could still be within a rather large range, even if the average ratios have gone up.

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