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The Impact of MFRS 16 Lease Accounting on Key Financial Ratios: Evidence from Publicly Listed Companies in Malaysia

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Abstract

This study investigates the financial impact of the transition from IAS 17 to MFRS 16 (the Malaysian equivalent of IFRS 16) *Leases* among companies listed on the Bursa Malaysia. The implementation of this standard, effective January 1, 2019, fundamentally altered lease accounting by requiring nearly all lease contracts to be recognized on the balance sheet, effectively eliminating the previous "off-balance sheet" treatment for operating leases. The primary objective of this research is to analyse the resultant changes in four key financial indicators: total assets, total liabilities, EBITDA, and debt-to-equity (leverage) ratios. Employing a quantitative comparative design, the study utilizes secondary data extracted from audited annual reports, comparing the 2018 (pre-adoption) and 2019 (post-adoption) financial periods. The theoretical framework is rooted in addressing information asymmetry and agency problems through enhanced transparency and comparability in financial reporting. The studies show significant impact to technology, telecommunication and media, and health care industries. The research sample size is 103 listed companies.

Keywords: IFRS 16 Lease, MFRS 16 Lease, Balance-Off Sheet, Evidence from Public Listed Companies, Leasing

Brief Background on Topic: IFRS 16 Leases

In January 2016, the International Accounting Standards Board (IASB) issued International Financial Reporting Standard (IFRS) 16 Leases. IFRS 16 Leases replaces IAS 7, which lacked transparency, and requires new improvements to meet current requirements of accounting and finance (Diaz et al.2019) IFRS 16 has an effective date of 1st January 2019, but is also applicable early if IFRS 15 Revenue from Contracts with Customers is also adopted. The Malaysian Accounting Standards Board (MASB) has also adopted IFRS 16 Leases and enforced it in Malaysia as the Malaysian Financial Reporting Standard (MFRS) 16 Leases, to ensure the standard has full legal authority within the Malaysian jurisdiction. It is word-for-word identical to IFRS 16 and has a similar effective date (MASB,2016).

Research Purpose

The purpose of this study is to examine the impact of IFRS 16 on Malaysian publicly listed companies on key financial ratios: on changes in total assets, total liabilities, EBITDA, and Debt/Equity ratio. This investigation will provide insights into the implications of IFRS 16 for financial reporting, comparability, and transparency among Malaysian publicly listed companies.

Research Problem

There is currently limited research regarding the comprehensive financial impact of MFRS 16 on publicly listed companies in Malaysia. This study addresses this gap by evaluating significant changes in assets, liabilities, and profitability metrics for firms on the Bursa Malaysia Main Market. A primary objective of this research is to perform a cross-sectoral analysis within the Malaysian market and compare these results with international empirical findings. By doing so, the study provides a deeper understanding of how the new lease accounting standard reshapes corporate financial profiles in Malaysia relative to global industry benchmarks.

The Need for Changes: IAS 17 Lease to IFRS 16 Lease

The International Accounting Standards Board (IASB) initiated the transition from IAS 17 to IFRS 16 after identifying a fundamental lack of transparency in lease accounting, where over 75% of lease liabilities were historically categorized as "off-balance sheet" operating leases. This classification prevented investors and analysts from obtaining an accurate picture of a company's true debt-like obligations and total asset base, making it difficult to compare firms that leased assets with those that purchased them directly. Furthermore, without standardized reporting, financial statement users often relied on rough estimates that frequently resulted in the overestimation of lease obligations. To resolve these issues, the IASB implemented IFRS 16, which mandates that lessees recognize nearly all leases on the balance sheet as right-of-use assets and corresponding liabilities. While lessor accounting remains largely unchanged due to cost-benefit considerations, the new standard for lessees effectively eliminates off-balance sheet financing, providing a more transparent and comparable view of corporate financial health (IFRS Foundation,2016)

The IFRS 16 has an Effect on the Financial Statements

In summary, though, bringing all leases into the balance sheet is intended to address the difficulties faced by users of financial statements today. It will do that by ensuring companies include properly measured financial liabilities for all leases, thereby addressing concerns that exist today about leverage information. Recognition of lease assets on the balance sheet will enable investors and analysts to compare companies that lease assets with those that purchase similar assets. The other primary financial statements will also be affected by IFRS 16. Now that assets and liabilities are to be recognised for all leases. Rental costs previously recognised for operating leases under IAS 17 will effectively be replaced by depreciation on the lease assets and interest on the lease liabilities. Compared to reporting under IAS 17, this will affect both the income statement and the cash flow statement by increasing financing costs and cash flows, and by decreasing operating expenses and cash flows. (IFRS Foundation,2016)

Literature Review

Under IFRS 16, the traditional distinction between operating and finance leases for lessees has been eliminated, mandating a uniform accounting treatment for all lease contracts. This shift requires the recognition of right-of-use assets and corresponding financial liabilities on the balance sheet. Consequently, because lease expenses previously recorded as operating expenses are replaced by depreciation and interest expenses, reported EBITDA generally shows an increase. Furthermore, an increase in financial leverage is expected as a result of rising financial liabilities and a potential decrease in equity (IFRS Foundation, 2016).

Morales-Díaz and Zamora-Ramírez (2018a) examined the transition to IFRS 16 within the European context using a broad sample of 646 companies. The study employs a new methodological approach to measure the 'on-balance sheet' impact, revealing a significant median increase of 9.96% in total assets and 21.4% in total liabilities. As a result, they observed a 32.1% rise in leverage ratios, which carries the potential to affect debt covenants and credit ratings. Notably, the authors highlight that this impact is highly sensitive to sector-specific capital structures, with industries such as transport, hospitality, and retail experiencing the most profound fluctuations due to their heavy reliance on leased infrastructure.

Białek-Jaworska et al. (2022) analysed the impact of IFRS 16 on 494 companies listed on the Warsaw Stock Exchange, utilizing a difference-in-differences methodology to isolate the effects of the new standard. By comparing 308 firms applying IFRS with a control group following the Polish Accounting Act, the authors found that the transition led to a 9.11% increase in total assets and an 18.51% rise in total liabilities. Consequently, the debt-to-equity ratio a key measure of leverage worsened significantly, increasing from an average of 1.2 to 1.6. The study concludes that while transparency has improved, the capitalization of leases has fundamentally altered key financial ratios and resulted in a noticeable decline in reported profitability indicators.

Rompotis and Balios (2023) examined the transition to IFRS 16 by 79 companies listed on the Athens Stock Exchange, providing one of the first 'ex-post' (actual) empirical analyses in an advanced emerging market. The findings reveal that the capitalization of leases resulted in an average increase of 8.42% in total assets. The impact on leverage was particularly pronounced, with the Net Debt/Equity ratio rising from 1.13 to 3.15. Furthermore, reported EBITDA showed a significant average increase of 32.01% due to the reclassification of lease payments from operating expenses to depreciation and interest expenses. The authors emphasize that the new standard has materially altered the financial profile of Greek firms and that investors must interpret profitability and leverage indicators with caution.

Lopes and Penela (2025) examined the effects of IFRS 16 through a single-industry study focusing on 74 European companies in the tourism industry, including sectors such as hotels, restaurants, and transportation. Analysing actual implementation data from 2019, the authors found that the transition led to statistically significant increases of 7.49% in total assets, 9.57% in total liabilities, and 16.85% in EBITDA. The study highlights that the capitalization of operating leases fundamentally alters financial statement structures, particularly in sectors with intensive lease usage. Notably, while structural and liquidity measures were significantly impacted, the researchers found that the increase in EBITDA was

generally offset by rising interest expenses, resulting in a neutral effect on the interest coverage ratios within the sample.

Koç (2022) examined the financial effects of IFRS 16 on a sample of 65 companies listed on the Borsa Istanbul (BIST) 100 index, excluding financial institutions and holdings. The study compared financial data from the two-year period before implementation (2017–2018) with the two-year period following it (2019–2020). The analysis results show that following the capitalization of operating leases, there was a fundamental change in balance sheet structures, with total assets increasing by 57.12% and total liabilities by 59.64%. In the sectoral analysis, the most significant changes occurred in the Wholesale and Retail Trade, and Hotels and Restaurants sectors. This profound impact demonstrates that these sectors were heavily dependent on off-balance sheet financing under the previous IAS 17 standard. The author concludes that while this transition increased reported leverage ratios, it significantly enhanced the transparency and fair presentation of financial statements by better reflecting the companies' actual resource usage and long-term obligations.

Güdelci (2021) analyzed the impact of IFRS 16 on the financial indicators of 12 retail companies listed on Borsa Istanbul (BIST). Using the Mann-Whitney U test to compare 2018 and 2019 data, the study revealed that although the transition was expected to significantly alter financial ratios, no statistically significant difference was detected across the general sample. While there was a slight increase in the financial leverage ratio (from 73% to 77%), the debt-to-equity ratio exhibited a 'negative trend,' dropping from an average of 9.06 to -14.37. The author attributes this unusual result to the fact that some retailers had negative equity in 2019, which inverted the ratio despite the actual increase in lease-related liabilities. The research suggests that in sectors with fragile capital structures, the capitalization of leases under IFRS 16 not only increases reported debt but can also deepen existing balance sheet imbalances.

Susanti et al. (2021) examined the effects of IFRS 16 through a case study on PT Garuda Indonesia Tbk, a leading airline that utilizes intensive leasing for its aircraft fleet. The research highlights that the transition from off-balance sheet to on-balance sheet accounting has fundamentally reshaped the company's financial profile. In line with global trends, the study found that the capitalization of operating leases led to a significant increase in total assets and total liabilities, as well as a marked rise in EBITDA. However, the authors observed that while certain metrics such as Return on Equity (ROE) showed improvement, the company's solvency and asset utilization efficiency declined as a result of the significantly increased leverage.

Spånberger and Rista (2020) examined the transition effects of IFRS 16 on public companies in Sweden, analysing the impact on both financial statements and valuation metrics. Using a sample of 279 firms, the authors identified significant median increases across the entire sample: 2.1% in total assets, 5.4% in total liabilities, and 12.3% in EBITDA. The study highlights profound sectoral differences; the Consumer Services sector emerged as the most affected, with median increases of 67.0% in EBITDA and 39.6% in total liabilities. In contrast, the financial sector showed minimal impact. Beyond balance sheet expansion, the research concluded that IFRS 16 fundamentally altered valuation multiples, observing a significant median decrease of 10.5% in the EV/EBITDA multiple and a 5.4% increase in the Debt/Equity

ratio. These findings demonstrate that the capitalization of leases effectively reduces information asymmetry, yet necessitates a recalibration of traditional financial analysis criteria.

Theoretical Framework and Empirical Evidence

The transition to MFRS 16 (the Malaysian equivalent of IFRS 16) is grounded in theories of information asymmetry and agency problems. The standard aims to reduce the information gap between managers and shareholders by converting lease transactions into an on-balance-sheet model, thereby enhancing reporting transparency and inter-firm comparability (Wang, 2024). Historically, the 'off-balance-sheet' nature of operating leases could lead to a misleading picture of a firm's true leverage and asset base. Spånberger and Rista (2020) argue that the inclusion of these liabilities on the balance sheet effectively reduces information asymmetry, but that this necessitates the recalibration of traditional financial analysis criteria.

Global empirical evidence consistently supports the expectation of an increase in balance sheet size. Morales-Díaz and Zamora-Ramírez (2018a) observed that the capitalisation of leases in 646 European firms led to an average increase of 9.96% in total assets and 21.4% in total liabilities. Similarly, researchers such as Koç (2022), who examined the Turkish market, and Susanti et al. (2021), who studied Indonesia, have documented much more pronounced increases in recognised liabilities, particularly in lease-intensive sectors such as aviation and retail.

Beyond balance sheet growth, the reclassification of rental expenses from operating expenses to depreciation and interest expenses mechanically alters profitability indicators. Rompotis and Balios (2023) found a 32% increase in EBITDA ratios for listed companies in Greece; Lopes and Penela (2025) confirmed statistically significant changes in EBITDA and ROA using post-implementation actual data. However, the impact on leverage remains the most volatile indicator. Białek-Jaworska et al. (2022) identified significant increases in debt-to-equity ratios in the Polish market, whilst research by Güdelci (2021) suggests that, in sectors with fragile capital structures such as the Turkish retail sector, negative equity can distort statistical trends and exacerbate existing balance sheet imbalances.

Research Hypotheses

In light of the theory of increased transparency and findings regarding a consistent rise in assets and liabilities in global markets, the following hypotheses are proposed for the Malaysian context:

- H_1: The implementation of MFRS 16 has a significant effect on the Total Assets of publicly listed companies in Malaysia.
- H_2: The implementation of MFRS 16 has a significant effect on the Total Liabilities of listed companies in Malaysia.
- H_3: The implementation of MFRS 16 has a significant effect on the EBITDA ratios of listed companies in Malaysia.
- H_4: The implementation of MFRS 16 has a significant effect on the debt-to-equity (leverage) ratios of publicly listed companies in Malaysia.

Research Methodology

MASB has made MFRS 16 Leases mandatory, effective from 1 January 2019, to replace the IAS 17 framework; this transition has fundamentally altered the way lease-related liabilities are recognised, measured and presented, marking a pivotal turning point in the history of financial reporting. This regulatory reform is based on the aim of reducing information asymmetry and agency problems arising from the 'off-balance-sheet' treatment under IAS 17, which allowed managers to possess superior information that masked the firm's true leverage (Wang, 2024). By mandating that almost all leases be recognised on the balance sheet, IFRS 16 aims to close this information gap, thereby enhancing transparency and comparability for shareholders.

Research Design

In this study, a quantitative comparative design is adopted to examine the empirical impact of IFRS 16 on companies listed on Bursa Malaysia; the analysis focuses on four key indicators: total assets, total liabilities, EBITDA and the debt-to-equity ratio. The transition process involves a mechanical reclassification that directly expands the balance sheet through the recognition of Right-of-Use (ROU) assets and related lease liabilities, whilst also increasing EBITDA as lease payments—previously recorded as operating expenses—are replaced by depreciation and interest expenses. To achieve these objectives, secondary data derived from annual reports is utilised; systematic sectoral classification and specific exclusion criteria are applied to ensure data integrity. Statistical rigour is maintained through a normality test, which guides the selection of appropriate inferential tests; all hypotheses are evaluated at 1% and 5% significance levels using SPSS and Microsoft Excel to calculate measures of central tendency and distribution.

Statistical Hypothesis Testing Methods

(Susanti et al., 2021) use the following equations to calculate the percentage change between the pre-implementation (2018) and post-implementation (2019) periods in order to measure the impact of IFRS 16 on financial indicators:

Equation 1: *Change in total assets* (%) = $\frac{(\text{Total assets post implementation} - \text{Total assets pre implementation})}{\text{Total assets pre implementation}} * 100\%$

Equation 2: *Change in total liabilities* (%) = $\frac{(\text{Total liabilities post implementation} - \text{Total liabilities pre implementation})}{\text{Total liabilities pre implementation}} * 100\%$

Equation 3: *Change in EBITDA* (%) = $\frac{(\text{EBITDA post implementation} - \text{EBITDA pre implementation})}{\text{EBITDA pre implementation}} * 100\%$

Equation4: *Change in Debt/Equity ratio* (%) = $\frac{(\text{Post implementation laverage ratio} - \text{Pre implementation laverage ratio}}{\text{Pre implementation laverage ratio}} * 100\%$

Data Collection Method

All data has been manually collected from the Bursa Malaysia website, which Bursa Malaysia provides for each listed firm's annual report. All data were recorded in an Excel file and tested in SPSS and also in Excel. The sample for this study was selected out of the total population of firms listed in Bursa Malaysia Main Market as of 2020-03-31. This study will use secondary

data, comprising an annual report of 193 companies in Bursa Malaysia. For this study, the data will be collected from 2016-2020. 5 years' time frame.

Sampling Design

Bursa Malaysia on the main market listed 15 sectors. Our research targets are 2 sub sectors and 4 sectors. There are Food and Beverage sub-sector, Travel, Leisure and Hospitality sub-sector Financial Services sector, and Technology industry, Telecommunications & Media sector and Health Care sector. The total sample size is 193. The following sectors have been selected non-randomly, previous studies show a significant impact on selected sectors and sub-sectors.

Sample Exclusion

As a result of the sample exclusion procedure implemented to enhance data reliability and validity, the sample size, which was initially 193, was reduced to 103 a decrease of 46.6%. During this process, a total of 90 samples were excluded, with the largest exclusion group (30 reports) relating to the COVID-19 pandemic and the Movement Control Order (MCO) that came into force in Malaysia on 17 March 2020. Reports published after the MCO were excluded due to the pandemic's limited and extraordinary impact on financial performance; however, the healthcare sector, which continued its operations uninterrupted as an essential industry, was included in the analysis (Shah et al.,2020). During the sample refinement stage, 30 companies issuing share warrants that resulted in duplicate listings in the main market were excluded, and four companies that did not meet the standard 12-month reporting period were also excluded to maintain reporting consistency. Furthermore, 14 investment companies with consolidated figures that could obscure sectoral differences, and 4 companies with foreign-currency-denominated data or lacking pre-IFRS 16 data, which would complicate financial comparability were excluded to form the final analysis group.

Sectoral Classification

Table 1

Sectoral classification

Sector	Subsector	No. Company	Total number of companies
Consumer products and service	Food and Beverage	23	40
	Travel, Leisure and Hospitality	17	
Financial service	Banking	8	18
	Insurance	8	
	Other financials	2	
Technology sector	Digital service	8	22
	Semiconductors	8	
	Software	3	
	Technology Equipment	3	
Telecommunication and Media	Telecommunication service providers	7	11
	Media	4	

Health care	Health care equipment	5	12
	Health care providers	2	
	Pharmaceuticals	5	
Sum of all companies 103			

Test of Normality

Statistical testing is required to test the hypotheses of this study. The t-test is commonly used to determine whether a significant difference exists between two populations, such as pre- and post-change. However, this test assumes that the samples being tested are normally distributed, which must be verified before any statistical testing can be done. The Test of Normality in SPSS is used to see if our entire sample of percentage changes in total assets, total liabilities, EBITDA, and D/E is normally distributed.

Test for Normality for the Full Sample of Firms

Table 2

Test of Normality

Test of Normality								
	Kolmogorov-Smirnov			**Shapiro-Wilk**				
Measures	**Statistic**	**df**	**Sig.**	**Statistics**	**df**	**Sig.**	**Skewness**	**Kurtosis**
Change in total assets %	.264	103	.000	.629	103	.000	3.781	20.827
Change in total liabilities %	.265	103	.000	.713	103	.000	2.713	9.392
Change in EBITDA %	.353	103	.000	.496	103	.000	3.514	22.902
Change in D/E %	.343	103	.000	.340	103	.000	6.897	53.905

To test whether our population is normally distributed, the study performed 4 non-parametric tests. There is the Kolmogorov-Smirnov test, the Shapiro-Wilk test, Skewness, and Kurtosis. However, only the Kolmogorov-Smirnov test of normality is used to assess the normality of the data in this study. Since our data consist of 103 (>50) observations, the study used the Kolmogorov-Smirnov test (Pollant,2016).

Based on the results in Table 2, our sample shows a clear absence of normality, and the curve is skewed. The Kolmogorov-Smirnov significance values for all four measures are 0.000 (<0.05), and the same holds for the Shapiro-Wilk test; all measures are 0.000 or less than 0.05. Skewness and kurtosis are greater than 1.0, indicating that the data are not normally distributed (Pollant,2016).

Because our data are skewed on the Kolmogorov-Smirnov and Shapiro-Wilk tests for four measurements, and the normal distribution is absent, this study will focus on interpreting median values rather than mean changes in our findings.

The Kolmogorov-Smirnov test is used to determine whether a sample from a population is normally distributed or skewed. Performing the Kolmogorov-Smirnov test requires the population size to be larger than 50. Besides that, the study aims to apply additional tests, such as the Skewness-Kurtosis test. The skewness and Kurtosis test is a test for normality, designed to detect deviation from normality (Pollant,2016).

There are fewer reasons for the absence of a normal distribution, and a skewed curve could be due to our population size. But the main reasons are too many extreme values in our population size set, which will result in a skewed distribution (Pollant,2016).

Non-Parametric Hypothesis Test

Based on the above test of normality, the study aims to use a non-parametric test to test the hypothesis. The study aims to use the Wilcoxon signed-rank test. Frank Wilcoxon introduced the Wilcoxon signed-rank test. The Wilcoxon signed-rank test is a non-parametric hypothesis test, also known as a free-distribution test. This test requires two related groups, and the paired samples are random and independent. The data of two related groups are presented at different points in time. This test can be used for pre-test and post-test designs. In this study, we use it to test differences between pre-implementation and post-implementation totals for assets, liabilities, EBITDA, and D/E. The Wilcoxon signed-rank test requires the population size to be larger than 60. The study uses this test to examine whether there are changes in total assets, total liabilities, EBITDA, and the D/E ratio, and whether the D/E ratio is significantly different from 0. Wilcoxon signed-rank test z value for a 95% confidence interval is z = 1.96 for a two-tailed test and directionality. (Rosie Shier, 2004). The Wilcoxon signed-rank test was used in previous studies to assess the impact of IFRS 16 on companies' balance sheets. (Jonathan S. Momtahina R., 2020, Morales-Díaz, J. & Zamora-Ramírez, 2018a, 2018b) Importance of the Wilcoxon signed-rank test to test the median change of the post and pre-implementation effect. Wilcoxon signed rank, z value. We aim to use the z value to support our hypothesis testing.

Proposed Data Analysis Tool

For this study, we aimed to use 2 data analysis tools. There are Microsoft Excel and SPSS. Microsoft Excel is a convenient tool for recording data and applying customised ratios. In this study, the aim is to list firms and record pre- and post-implantation values for total assets, total liabilities, EBITDA, and the E/D ratio. In addition, the study performs calculations in Excel, including changes in total assets, total liabilities, EBITDA, and E/D. SPSS is widely recognised as statistical software for performing a complex set of statistical tests. The importance of SPSS for this study is to test our data for normality, calculate the Wilcoxon signed-rank test for four measurements, and perform descriptive statistics.

Results and Discussion

Introduction

In this chapter, the study is going to discuss the effects of MFRS 16 on Total assets, total liabilities, EBITDA, and the D/E ratio of Malaysian publicly listed firms. The study aims to test

our four hypotheses. Furthermore, the study has divided the population into sectors and subsectors to determine the impact of MFRS 16 on each sector and subsector.

Results from the Full Sample

Table 4 presents the full sample results, calculated using the equations for changes in total assets, total liabilities, EBITDA, and Net Debt/Equity as stated in the methodology section. Including 7 types of measures, N refers to the number of firms tested, median, mean, Wilcoxon z value, minimum, maximum, and standard deviation.

Table 3
Results from the full Sample

Measure	**Δ Tot. Assets**	**Δ Tot. Liabilities**	**Δ EBITDA**	**Δ D/E**
N	103	103	103	103
Median	**6.1%**	**5.1%**	**8.9%**	**-0.05%**
Mean	10.2%	10.1%	44.1%	16.3%
Wilcoxon z value	**-5.353****	**-3.862****	**-4.030****	**-0.328**
Min	-41.2%	-56.9%	-881%	-80.8%
Max	184.3%	181.9%	1697%	940%
Standard Deviation	26.4%	36.2%	254%	109.4%

* Significant on the 5% level ** Significant on the 1% level

Effects on the Statement of Financial Position

For the first three financial measures- total assets, total liabilities, and EBITDA. We can observe a significant effect of the implementation of MFRS 16 on Malaysian publicly listed companies. The median increase for total assets and total liabilities is relatively similar, at 6.1% vs 5.1%. However, the median increase in EBITDA is the highest, at almost 9.8%. There is a significant level for total assets, total liabilities, and EBITDA, which is at 99%. Wilcoxon z-values for total assets, total liabilities, and EBITDA: -5.353**, -3.862**, and -4.030**, respectively. Total assets have the highest z-value among the 3 dependent variables. based on the table. There are abnormal min and max values in the changes in total assets and total liabilities. The total assets minimum is -41%; this value comes from Censof Holdings Berhad's annual report. The annual report from Censof for 2019 and 2020 shows a decrease from RM 189,469,000 to RM 111,389,000, a reduction of RM 78,107,000. This is due to Censof stopping investment in an associate. Total liability min value: -56.9%. This negative value comes from the Excel Force MSC Berhad. Total liabilities have fallen from RM 11,520,610 to RM 4,964,743 due to a significant decrease in firms' payables. The standard deviation values for total assets and total liabilities are 26.4% and 36.2%, respectively; both are further from the mean, indicating a high spread. The standard deviation for EBITDA is 254%, which is the highest value between.

Effects on the Financial Ratio

From the results in Table 3, the study determines that the D/E median value is -0.5%, and the mean value is 16.3%. The Wilcoxon z-value for the debt-to-equity ratio is -0.328. The Z value does not meet the 5% significance level. The median change for Debt/Equity is insignificant. Based on the Wilcoxon z-value, we reject the alternative hypothesis and accept the null hypothesis, and state that there is no significant effect of the implementation of MFRS 16 on the Debt/Equity of listed companies in Malaysia. However, hypothesis testing is only applied

to this population within this selected sector. The study assumes that the population size is still small enough to identify the impact of MFRS 16, as in previous studies, the population size ranged from 279 to 2122 firms.

Descriptive Statistics by Sector

Table 4

Descriptive statistics by sector

Sector	**Measure**	**ΔTot. Assets**	**Δ Tot. liabilities**	**ΔEBITDA**	**Δ D/E**
Food and Beverage (N=23)	Median	**4.13%**	3.80%	**7.79%**	-4.36%
	Mean	4.79%	5.39%	3.97%	1.3%
	Wilcoxon Z	**-2.707****	-1.369	**-1.977***	-.152
	Minimum	-18%	-21%	-270%	-31%
	Maximum	19%	25%	118%	34%
Financial Services (N=18)	Median	**6.62%**	**5.26%**	**5.81%**	-2.45%
	Mean	5.73%	5.09%	13.78%	0.9%
	Wilcoxon Z	**-2.765****	**-2.417***	**-2.940****	1.067
	Minimum	-10%	-22%	-1%	-20%
	Maximum	21%	56%	92%	69%
Technology (N=22)	Median	**8.3%**	-9.27%	16.8%	-14.8%
	Mean	16.25%	-1.44%	83.5%	6.7%
	Wilcoxon Z	**-2.191***	-.406	-.925	-1.934
	Minimum	-41%	-57%	-881%	-81%
	Maximum	184%	157%	1697%	160%
Travel, Leisure and Hospitality (N=17)	Median	0.23%	5.31%	-2.41%	**6.63%**
	Mean	9.52%	25.53%	81.17%	87.28%
	Wilcoxon Z	-.402	-1.728	-0.497	**-2.021***
	Minimum	-40%	-15%	-350%	-25%
	Maximum	120 %	182%	1204%	941%
Telecommunication and media (N=11)	Median	8.92%	14.58%	10.45%	14.79%
	Mean	12.18%	28.81%	47.49%	27.74%

	Wilcoxon Z	-2.667**	-2.401*	-1.778	-1.778
	Minimum	-0.1%	-6%	-64%	-32%
	Maximum	31.31%	93%	345%	128%
Health Care (N=12)	Median	8.99%	3.93%	13.6%	-3.14%
	Mean	15.85%	12.65%	38.57%	2.17%
	Wilcoxon Z	-2.432**	-1.255	-1.883	-.178
	Minimum	-17%	-20%	-88%	-67%
	Maximum	74%	133%	250%	71%

* Significant at the 5% level ** Significant at the 1% level

In this section, we performed descriptive statistics by sector. It is important to observe how different sectors and sub-sectors experience the implementation of MFRS 16 on the financial measures and D/E. We discovered that not all financial measurements meet the 5% threshold. The same goes for the D/E ratio. It can be explained by a low sample size across sectors and sub-sectors. The study will discuss only the measurement, which is significant at the 1% and 5% levels.

The Impact of IFRS 16 on Sectors: A Comparison of Current Findings and the Existing Literature

This section presents the impact of IFRS 16 across various industries from a comparative perspective and compares the findings from the Malaysian context with global and regional findings. To ensure a smooth discussion of the data presented in the following tables, the comparative data is based on the following primary sources: For global perspectives, the IFRS Foundation (2016) has been referenced; for the Turkish market, Koç (2022); for the Swedish context, Spånberger and Rista (2020); and for trends across Europe, Lopes and Penela (2025). The fundamental limitation acknowledged in this comparative framework is that industrial structures across countries differ. Even if the main sector headings (e.g. Transport or Retail) are the same, the sub-sectors and operational leasing practices within these sectors may vary from country to country. Therefore, whilst the aforementioned references provide a valuable basis for comparison, direct comparisons must be interpreted with caution due to these natural differences in sub-sector characteristics.

Technology

Table 5

Technology İndustries

	Malaysia(N=22)	Sweadish (N=32)	Türkiye (N=3)
Δ Total assets	%8,3	%5,5	%31,51
Δ Tatal liabilities	%-9,27	%13	%34,39
Δ EBITDA	%16,8	%18,7	-
Δ Leverage ratio	%-14,8	%13	-

The implementation of IFRS 16 has fundamentally reshaped the financial statements of technology companies across these three regions, primarily by forcing previously "invisible"

operating leases onto the balance sheet. In Türkiye, the impact was most dramatic, with total assets surging by 31.51% and liabilities by 34.39%. This suggests that the sampled Turkish tech firms relied heavily on rented infrastructure, such as data centres or office hubs, which were converted into substantial Right-of-Use (ROU) assets upon adoption. By contrast, Sweden experienced a more moderate adjustment, seeing a 5.5% increase in assets and a 13% increase in liabilities, indicating a more balanced mix of owned versus leased property or perhaps a more mature transition environment. Beyond the balance sheet, the standard created a significant "optical" boost to profitability metrics like EBITDA. Because lease payments are now classified as depreciation and interest rather than operating expenses, Swedish tech firms saw their EBITDA jump by 18.7%, with Malaysia following closely at 16.8%. This change doesn't reflect an increase in actual cash flow, but rather a shift in how that cash is categorized. Interestingly, the Malaysian data presents a unique outlier in leverage; while Sweden's Debt/Equity ratio rose by 13% as expected, Malaysia reported a 14.8% decrease.

Travel, Leisure, and Hospitaity

Table 6

Travel, Leisure and Hospitality Industries

	Malaysia (N=17)	Türkiye (N=7)	Global (N=69)	Europe (N=74)
Δ Total assets	%0,23	%8,75	%20,7	%7.49
ΔTotal liabilities	%5,31	%6,38	-	%9.57
ΔEBITDA	%-2,41	-	%25,81	%16.85
Δ Levarage ratio	%6,63	-	-	-

The impact of IFRS 16 on the travel, leisure and hospitality industry shows marked differences between regions, depending on the ownership and leasing preferences of operational structures. In line with global data, significant increases of 20.7% in total assets and 7.49% across Europe have been recorded. In Turkey, however, the increase in assets among the companies examined by Koç (2022) stood at 8.75%; this confirms the sector's global reliance on right-of-use assets such as hotels, aircraft and fleet leasing.

In contrast, Malaysian data deviates significantly from this general trend, showing an increase of only 0.23% in total assets. This low rate suggests that the Malaysian companies in the sample control their assets through ownership rather than leasing, or that their existing lease contracts fall within the scope of short-term/low-value exemptions. When examining profitability indicators, a strong 'accounting' increase in the EBITDA line item is observed in the global (25.81%) and European (16.85%) samples due to the reclassification of rental expenses, whilst a decrease of 2.41% was recorded in Malaysia. This negative deviation indicates that the expected increase arising from the standard was offset by the sector's decline in operational performance during that period or by other operating expenses that remained high.

In terms of leverage analysis, Malaysia reported a 6.63% increase in the Debt-to-Equity ratio. Combined with a 5.31% rise in total liabilities, this indicates that the inclusion of lease liabilities in the balance sheet under the standard has pushed financial risk indicators upwards, in line with expectations.

Telecommunication and Media

Table 7

Telecommunication and Media industries

	Malaysia (N=11)	Global (telecommunication N=56 media N=48)	
ΔTotal assets	8.92%	Telecommunication 6.1%	Media 5.5%
ΔTotal liability	14.58%	-	
ΔEBITDA	10.45%	Telecommunication 8.79%	Media 9.14%
ΔLeverage ratio	14.79%	-	

Malaysian's telecommunication and media, the impact on the balance sheet is particularly pronounced, with Total Assets increasing by 8.92% and Total Liabilities surging by 14.58%. This suggests that Malaysian firms in this sector utilize a high volume of "right-of-use" assets that were previously off-balance sheet. Globally, the asset growth was more moderate, with telecommunications seeing a 6.1% rise and media a 5.5% rise. The discrepancy highlights that Malaysian telecommunication and media companies may have more aggressive leasing strategies or less owned infrastructure compared to their global counterparts. The transition to IFRS 16 fundamentally changes the income statement by shifting lease expenses from operating costs to depreciation and interest. This is reflected in the 10.45% increase in EBITDA for Malaysia, which is slightly higher than the global telecommunications increase of 8.79% and the media increase of 9.14%. While this makes companies appear more profitable at the operational level, it is accompanied by a significant rise in leverage. The Debt/Equity ratio in Malaysia grew by 14.79%, a critical shift for investors to note.

Health Care

Table 8

Health care industries

	Malaysia (N=12)	Swedish (N=51)	Global (N=55)
ΔTotal assets	8.99%	5.0%	2.9%
ΔTotal liability	3.93%	16.5%	-
ΔEBITDA	13.6%	6.9%	4.15%
Δ Leverage ratio	-3.14%	16.5%	-

Malaysia saw a substantial 8.99% increase in Total Assets, which is significantly higher than the 5.0% increase in Sweden and the 2.9% global average. This suggests that Malaysian healthcare providers may rely more heavily on leasing their facilities or diagnostic machinery than their international peers. Interestingly, while Sweden saw a massive 16.5% spike in Total Liabilities, Malaysia's liability growth was relatively contained at 3.93%. This discrepancy could imply that Malaysian firms already carried significant debt, or that the specific terms of their leases resulted in a lower present value of lease liabilities compared to the asset value recognized.

The impact on EBITDA is perhaps the most striking metric for the Malaysian healthcare sector, showing a surge of 13.6%. This is nearly double the increase seen in Sweden (6.9%) and more than triple the global average (4.15%). Because lease payments are moved out of operating expenses and into depreciation and interest, the "paper" profitability of these hospitals and clinics appears much stronger under IFRS 16.

Limitation of Studies

Our studies suggest to expand the sample size to larger group, since our analysis limited to fewer sectors and sub-sectors. Larger sample size and expanding list of unlisted sectors and subsectors shall bring new insight how different industries are impacted by IFRS 16.
Next suggestions are to increase number of financial ratios and financial indicators. Various studies show there is significant impact to: Operating profit, current ratio, Asset turnover, EBIT/ Operating profit, Operating cash flow (IFRS Foundation,2016)

Theoretical and Contextual Contributions

Theoretically, this research makes a significant contribution by grounding the empirical shifts observed in Malaysian financial data within the frameworks of agency theory and information asymmetry. By investigating the transition from the "off-balance sheet" model of IAS 17 to the mandatory capitalization model of MFRS 16, the study provides a robust validation of how regulatory transparency reduces the information gap between managers and shareholders. The significance of this study is underscored by its findings across a sample of 103 publicly listed companies, which revealed median increases of **6.1% in total assets, **5.1% in total liabilities, and a substantial **8.9% in EBITDA*. These results demonstrate that the mechanical reclassification of lease payments into right-of-use (ROU) assets and lease liabilities serves as a corrective measure for historically "invisible" debt, thereby enhancing the faithfulness and comparability of financial reporting.

Contextually, this study fills a critical gap in the Malaysian market where limited research previously existed regarding the comprehensive financial impact of MFRS 16 on companies listed on Bursa Malaysia. The research is particularly significant for its sectoral analysis, highlighting that the transition had a significant impact on the Technology, Telecommunications & Media, and Healthcare industries. These findings provide a vital benchmark for Malaysian investors, auditors, and analysts, signalling that the observed increases in profitability metrics like EBITDA are a structural consequence of replacing rental costs with depreciation and interest, rather than a change in underlying operational performance. Ultimately, this research situates the Malaysian experience within a global regulatory framework, offering essential insights for recalibrating financial analysis criteria in the post-MFRS 16 era.

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