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# Leases: How has IFRS destroyed EBITDA and how are analysts coping with it?

With IFRS 16, EBITDA has completely changed. What do analysts think? How can financial information and disclosures help?

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*To our Professor Christophe Marion, for the invaluable help and guidance*
*To all interviewees, who took time out of their busy schedules to share their unique views*
*To our families, for the unconditioned love and support*
*To our friends, who made this and all other journeys together breathtaking*
*To Alicia and Giovanni, who everyday help make this life the most worth living.*

*To each other, for the friendship lying behind these pages*
*will follow us wherever our lives will take us.*

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# 1. Objectives of the Dissertation and Methods

The overarching objective of this dissertation is to investigate the impact of IFRS 16 on the calculation and interpretation of EBITDA – possibly the most used financial metric – and to understand how financial analysts are adapting their approaches to cope with these changes. Specifically, the research aims to: 1. analyse the accounting implications of IFRS 16 (with a focus on its effects on EBITDA calculations across different industries); 2. examine the divergence between IFRS 16 and US GAAP (ASC 842) in the treatment of leases in the income statement, and the resulting comparability issues for EBITDA figures; 3. conduct empirical research through interviews with financial professionals to gain insights into their strategies for adjusting EBITDA calculations and interpreting financial statements in the post-IFRS 16 environment.

To achieve these objectives, the thesis employs a qualitative research methodology, utilizing semi-structured interviews as the primary data collection technique; this approach allows for an in-depth exploration of the subjective experiences and perspectives of financial analysts, accountants, and industry experts who have been directly impacted by the implementation of IFRS 16. In fact, the semi-structured interview format provides flexibility for interviewees to share their personal experiences and insights, while also ensuring that key aspects of the research objectives are addressed through a predetermined set of questions. The interview questions are designed to cover various facets of IFRS 16's impact, including:

(i) The perceived importance of lease accounting in the interviewee's professional role;

(ii) The specific adjustments made to financial analysis frameworks following IFRS 16 implementation;

(iii) The impact on EBITDA calculations and the adoption of alternative performance metrics.

(iv) The challenges posed by the divergence between IFRS 16 and ASC 842;

(v) The cross-sectional variations in the magnitude of IFRS 16's impact across different industries;

(vi) The overall assessment of IFRS 16 and its implications for the future of lease accounting.

By combining a comprehensive literature review with empirical insights from industry professionals, this dissertation aims at providing a holistic understanding of the complexities

introduced by IFRS 16 and the strategies employed by financial analysts to maintain the relevance and comparability of their assessments in the post-IFRS 16 era.

# 2. Introduction

## 2.1 Abstract

The introduction of IFRS 16 has fundamentally disrupted the calculation and interpretation of EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization); in short, this new accounting standard requires lessees to recognize most leases on their balance sheets, treating them similarly to financed purchases. This dissertation explores the profound impact of this change, examining how IFRS 16 has effectively altered the traditional understanding and usefulness of EBITDA as a metric for financial analysts and investors: it delves into the rationale behind the new standard, its specific accounting implications, and the challenges it poses for interpreting and adjusting EBITDA calculations across different industries and jurisdictions. Notably, the treatment of leases in the income statement under IFRS 16 diverges from the approach taken by US GAAP (ASC 842): this divergence has created potential comparability issues for analysts, as EBITDA calculations may differ significantly between companies following IFRS and those adhering to US GAAP, even within the same industry.

## 2.2 Research Questions and Scope

The literature review is structured to provide a comprehensive understanding of the historical context, theoretical foundations, and empirical evidence related to the research question. It is organized as follows:

(i) **Chapter 3.1** delves into the theoretical foundations of lease accounting, exploring the conceptual debates surrounding the recognition and measurement of leases, as well as the arguments for and against capitalizing operating leases on the balance sheet;

(ii) **Chapter 3.2, 3.3, 3.4 and 3.5** present an overview of the historical development of lease accounting standards, tracing the evolution from the previous IAS 17 and ASC 840 standards to the current IFRS 16 and ASC 842 frameworks. This chapter highlights the perceived shortcomings of the previous standards and the motivations behind the push for reform;

(iii) **Chapter 4.1, 4.2, and 4.4** provide a detailed analysis of the specific accounting implications of IFRS 16, including the recognition of right-of-use assets and lease liabilities, the impact on EBITDA calculations, and the resulting challenges for financial statement analysis and interpretation;

(iv) **Chapter 4.3** explores the comparability issues arising from the divergence between IFRS 16 and US GAAP (ASC 842) in the treatment of leases, and the potential implications for financial analysts and investors in assessing and comparing companies across different jurisdictions;

(v) **Chapter 4.5** examines the empirical literature on the impact of IFRS 16 across various industries, drawing insights from academic studies, industry reports, and professional analyses; it highlights the cross-sectional variations in the magnitude of the impact, depending on the industry's reliance on leasing arrangements.

## 2.3 Structure of Literature Review

The literature review is structured to provide a comprehensive understanding of the historical context, theoretical foundations, and empirical evidence related to the research question. From a literature perspective – and referencing to the scope outlined above – **Chapter 3** presents an overview of the historical development of lease accounting standards, tracing the evolution from the previous IAS 17 and ASC 840 standards to the current IFRS 16 and ASC 842 frameworks, and attempts at highlighting the perceived shortcomings of the previous standards and the motivations behind the push for reform, drawing from contemporary literature contributions. It delves into the theoretical foundations of lease accounting, exploring the conceptual debates surrounding the recognition and measurement of leases, as well as the arguments for and against capitalizing operating leases on the balance sheet; our literature review here was an attempt to capture all different existing (and conflicting) views on the subject matter. **Chapter 4**, instead, provides a detailed analysis of the specific accounting implications of IFRS 16, including 1. the recognition of right-of-use assets and lease liabilities, 2. the impact on EBITDA calculations, 3. the overall comparability with ASC 842 and 3. the resulting challenges for financial statement analysis and interpretation. Moving on, **Chapter 5** is instead meant to outline the results of this dissertation's empirical results, hence attempting to give our own contribution to the existing literature.

Overall, we made an extensive use of the existing literature with the aim of creating a single, omni comprehensive, easily accessible and user-friendly manual, capable of guiding the reader through the intricacies of the subject matter – leases – and providing a personal, concrete, and empirical contribution to the currently existing literature.

## 2.4 Summary of Findings

The key findings of the dissertation suggest that while IFRS 16 has brought about greater transparency and comparability in lease accounting, it has also introduced significant challenges for financial analysts in interpreting and adjusting EBITDA calculations. Intuitively indeed, the impact of IFRS 16 varies considerably across industries, with sectors heavily reliant on leasing arrangements, such as retail, transportation, and hospitality, experiencing the most substantial disruptions.

What we found out while carrying out our empirical research is that financial analysts have adopted various strategies to cope with the changed meaning of EBITDA under IFRS 16. These include:

1. Adjusting EBITDA calculations to include the income components relative to leases – depreciation of Right of Use asset and passive interests (EBITDAaL e.g. after Leases), effectively reverting to a pre-IFRS 16 definition of the metric;
2. Relying more on cashflows – rather than on EBITDA – which better reflect a company's operational performance in the new accounting landscape;
3. Seeking additional disclosures from companies to enhance their understanding of leasing contracts implications and to facilitate more accurate adjustments to EBITDA and other financial metrics;
4. Developing industry-specific approaches and best practices for financial analysis and reporting in this post-IFRS 16 environment, while recognizing how the impacts vary across sectors.

Overall, the thesis highlights the various complexities introduced by IFRS 16 and the need for financial professionals to adapt their analytical approaches to maintain the relevance and comparability of their assessments in the post-IFRS 16 era, and, even more importantly, it also underscores the high importance of ongoing dialogue and collaboration between standard-setters, companies, and analysts to ensure the effective implementation and interpretation of the new lease accounting standards.

# 3. Before IFRS 16: Different Regulations and EBITDA Impact

## 3.1 Leasing Contracts: Introduction and Main Features

Leases are contractual agreements in which one party (the *lessor*) provides an asset for use by another party (the *lessee*) in exchange for periodic payments. Leases have historically been an important financing and operational tool for many businesses, and – indeed, to a different extent – most enterprises nowadays make use of these contracts. The mechanics is the following: the lessor grants the right to use their property or asset to the lessee in exchange for periodic payments, where the lease agreement specifies the terms and conditions, such as the duration, rent amount, responsibilities of each party, and other provisions governing the use of the leased asset.

The first key concepts outlined in this introductory chapter are meant to help: i) substantiate the need for the present dissertation, ii) legitimate the research question, and iii) highlight the originality compared to the pre-existing literature, while providing the reader with a first, broad understanding of the matter at stake.

The most widespread and common example of leasing contract regards a firm's offices or premises; an individual or a firm might opt for leasing out a commercial office space, a retail or restaurant space, some industrial or warehouse facilities, or residential properties. Though, leases can be used to finance a wide variety of tangible and intangible assets beyond just real estate. For instance, assets that are commonly leased are tangible assets such as vehicles (car, trucks, fleets), aircrafts and helicopters, ships, construction, agricultural, and medical equipment, complex machinery like aircraft engines and high-value manufacturing equipment, computers and IT hardware, and furniture and fixtures. In a similar fashion, intangible assets – i.e. software and enterprise systems, patents, trademarks, intellectual property, broadcast rights (e.g. for sporting events, movies, TV shows), mineral rights and natural resources, and emission allowances and carbon credits – can be the objects of a lease contract and are quickly gaining popularity, with the latter list expanding exponentially.

When it comes to acquiring the assets needed to operate a business, organizations have the choice between outright ownership or leasing. While ownership may seem like the more straightforward option, lease contracts can actually offer a range of compelling advantages that make them an attractive alternative. Perhaps, the most fundamental benefit of leasing is the lower upfront costs involved: choosing a leasing contract entails a cheaper entry point,

allowing businesses – especially startups and smaller firms – to access assets they need without the large upfront capital expenditure of outright purchase. Purchasing an asset outright, whether it's a piece of equipment, a vehicle, or commercial real estate, requires a significant Capex upfront which may not always be available; this improved cash flow availability can be crucial for managing finances and funding other operational priorities. Beyond the initial cost savings, leases also logically provide greater flexibility, since lease terms are typically shorter than the full economic life of an asset, giving the lessee the ability to regularly upgrade or change out equipment as their needs evolve. This helps mitigate the risk of asset obsolescence, which is an ever-present concern in today's rapidly changing technological landscape. On top of that, the lessor also often bears responsibility for maintenance and repairs, further reducing the administrative burden on the lessee. Finally, lease contracts can be highly customized to the specific needs of the lessee: the duration, payment structure, and even purchase options at the end of the lease term can all be tailored to the specific agreement to align with the organization's strategic and financial objectives. This flexibility is invaluable for managing cash flow and ensuring the leased assets support the business in the most optimal way. However, historically, the most controversial and debated feature of lease contracts has been the possibility to keep some leasing arrangement out of the lessee's balance sheet ("Off-Balance Sheet"), in both asset and liability terms; this could indeed improve key financial ratios and provide more favourable optics for investors and other stakeholders, but entails – for the exact same reasons – a lack of transparency and a potentially-biased view of a company's financials. The scale of the global leasing industry is considerable – showing a growth of 84% compared to the past decade (Solifi, 2023) – and, over the years, it has represented an area where some firms have employed the lease contractual form to reduce the size of their balance sheets and improve the appearance of their financial statements. In 2021, the top 50 leasing markets worldwide reported a total new business volume of $1,463 billion, up 9.3% from $1,338 billion in 2020, as the industry emerged from the pandemic (Solifi, 2023). Companies active in certain industries make an extensive use of lease contracts, and sometimes even their very core operating assets are accessed via leasing contracts. Especially before the introduction of IFRS 16, there was extensive room of manoeuvre for the lessee to modify the final look of their financials by keeping leased assets – and related risks – off-balance sheet. This aspect is extensively discussed throughout the dissertation when the previous standards under IAS 17 and the rationale underpinning IFRS 16 are discussed (please refer to chapter 4.1).

When analysing the characteristics of leasing contracts and the benefits generally associated with them, an overview of the relevant clusters frequently referred to by the financial sector can also help trace some simple lines useful in developing a sounder understanding of the leasing mechanism. Throughout this dissertation, the historical dichotomy between *operating leases* and *financial leases* is thoroughly analysed under the different lenses given by the different accounting frameworks applied. Beyond this division, there are several other specialised leases (not discussed thoroughly in this dissertation for the sake of brevity and of pursuing the real scope of the latter), even though, as mentioned above, leases differ broadly by granting optimal flexibility according to the needs of the two parties.

In conclusion, this introduction to i) the broadness of the scope of application of lease accounting, ii) the analysis of the many incentives for firms to underwrite leasing contracts, and iii) the potential damages to market participants in case of fraud, is necessary to fully legitimize, substantiate, and explain the aim of this dissertation: leases finance a very substantial portion of investment and asset acquisition, which makes a thorough understanding of their role in corporate finance and investment decisions essential. From a firm's standpoint, leasing decisions involve complex trade-offs, where advantages and disadvantages of leasing versus outright purchase must be carefully weighted when acquiring assets, and where factors such as tax implications, cash flow management, and risk allocation can be of crucial influence. Now that the magnitude of the consequences of leases decisions has been assessed, it is simple to imagine how significantly the accounting treatment of leases can impact a company's financial statements, and hence how changes to lease accounting standards – an example being the shift from IAS 17 to IFRS 16 – have far-reaching implications that are important to analyse. Finally, to academically adopt the view of investors and external stakeholders, it is now clear that research on a company's leasing policy is valuable for capital market investment decisions, and that, therefore, setting appropriate accounting standards and disclosure requirements is necessary to protect market participants and overall correct market functioning, including pricing mechanisms. Many examples in the existing literature exploring the topic provide useful lenses to analyse the historical developments of the different accounting frameworks, the different scandals born due to pitfalls in leases accounting rules, and the controversial nature of the state of the art; the current dissertation aims at partially filling the gap between the theoretical perspective and the pragmatic impact of leases accounting and its consequences.

## 3.2 History of Lease Accounting in IFRS: IAS 17

Before the introduction of IFRS 16 – effective from January 1st, 2016 – it was the objective of International Accounting Standard (IAS) 17 to prescribe the appropriate accounting treatment and disclosures to apply in relation to leases, for both lessors and lessees. The following paragraphs briefly touch on the key principles and classifications around which IAS 17 was founded and their impact on the financials of a company, in order to give to the reader a proper framework to discuss and understand the intrinsic features of this for certain aspects controversial standard, the clear limitations of its approach, and the reasons and dynamics which led to the introduction of IFRS 16.

Under IAS 17, the main criterium for the classification of leases was "based on the extent to which risks and rewards incidental to ownership of a leased asset would lie with the lessor or the lessee. Risks include the possibilities of losses from idle capacity or technological obsolescence and of variations in return because of changing economic conditions, while rewards may be represented by the expectation of profitable operation over the asset's economic life and of gain from appreciation in value or realisation of a residual value" (Muthupandian, K.S., 2009). Lessees were required to classify leases as either finance leases or operating leases. A *finance lease* would transfer substantially all such risks and rewards incidental to ownership of an asset, while an *operating lease* would not; it is also worth mentioning that this classification would be made at the inception of the contract. In the balance sheet of a lessee, financial leases would be initially recognised as assets and liabilities (assumptions of an obligation to pay future lease payments) at amounts equal to the fair value of the leased asset (or, if lower, the present value of the minimum lease payments, where the discount rate is represented by either the interest rate implicit in the lease or the lessee's incremental borrowing rate) at the inception of the lease term. On this basis, any other initial direct cost of the lessee would be added to the total asset amount. As per financial leases' subsequent measurements, the lessee would need – in summary – to i) recognise a depreciation charge for the leased asset in each period, ii) recognize a finance cost in each period, calculated by applying the interest rate implicit in the lease to the remaining lease liability balance, and iii) apportion the lease payment between the finance cost and reduction of the outstanding liability. As per the operating leases instead, they would be recognized as an expense in the income statement on a straight-line basis over the lease term (unless another systematic basis would be more representative of the time patter of the user's benefit) (Muthupandian, 2009). To summarise, under the provisions of IAS 17, a lessee had to make a distinction between a

finance lease (on balance sheet) and an operating lease (off balance sheet), while the new accounting model requires the lessee to recognise almost all lease contracts on the balance sheet (with optional exemptions for certain short-term leases and leases of low-value assets) (Bunea-Bontas, 2017).

This dual model of lease accounting under IAS 17 resulted in many leases – particularly those classified as operating leases, being kept off the lessee's balance sheet. This meant that users of financial statements could potentially not have a complete picture of the lessee's lease obligations and the associated assets being used. The IASB recognized this as a shortcoming of IAS 17 and sought to address it by issuing IFRS 16 Leases in 2016, which eliminated the distinction between finance and operating leases for lessees; more precisely, under IFRS 16 finance leases do not exist from the perspective of lessees (please refer to Chapter 4). The new standard hence "requires lessees to recognize all leases on the balance sheet", with limited exceptions for short-term and low-value asset leases (Stencheva-Todorova and Velinova-Sokolova, 2019). As it will be thoroughly discussed below, "the objective of IFRS 16 is to report information that (a) faithfully represents lease transactions and (b) provides a basis for users of financial statements to assess the amount, timing and uncertainty of cash flows arising from leases" (IASB, 2016).

### 3.3 History of Lease Accounting in US GAAP: ASC 840

Notwithstanding the European and IFRS-based approach adopted in this dissertation, we deemed a brief mention of US GAAP's ASC 840 – parallel to the above digression on IAS 17 – useful for an in-depth understanding of the matter at stale, as in the United States leases accounting has historically been exactly as controversial as in Europe. After years of historical and spiking pressure from market participants, in 1976 the Financial Accounting Standard Board (FASB) issued Statement for Accounting Standards (SFAS) 13, which later became the continuously amended basis for ASC 840, the main lease accounting framework preceding the current ASC 842.

The main goal of ASC 840 was capitalizing long-term financial leases on lessee’s books, provided that they met at least one or more of four very specific rules or tests (McCallum *et. al.*, 2020). While the lease scope was broader in IAS 17 – with ASC 840 applying to property, plant, and equipment only – the classification of the leases was somewhat similar; in ASC 840, the same dichotomy between *operating leases* and *capital* (financial) *leases* is proposed. It is worth highlighting that, even though the resemblance given by this parallel division is striking,

the lease classification criteria were different between the two leasing accounting standards: in fact, leases might have been classified differently under IFRS and US GAAP. While IAS 17 focused on whether the lease transferred substantially all risks and rewards of ownership, without specific quantitative thresholds, ASC 840 instead had four criteria for capital lease classification which, more importantly, contained some specific quantified thresholds, some bright-line tests such as whether the lease term equals or exceeds 75% of the economic life of the leased asset ("75% test") or the present value of the minimum lease payments equals or exceeds 90% of the fair value of the leased property ("90% test") (PwC, 2019). Other differences among the two standards – not discussed thoroughly due to the non-direct relation to the scope of this dissertation – concern land and building components, leveraged leases, and lease renewals.

In conclusion, the historical development of lease accounting in US GAAP under ASC 840 highlights the complexities and controversies that paralleled those in European standards. ASC 840, evolving from SFAS 13, introduced specific criteria for capitalizing long-term financial leases, delineating a framework distinct yet reminiscent of IAS 17. This brief introduction is followed by an analysis of the comparability of EBITDA figures between the two, which offers an insightful precedent for the main body of this dissertation: the way in which analysts cope with the disruptive effect of the introduction of IFRS 16, including the comparison between EBITDA figures built according to the latter and those following ASC 842 standards.

### 3.4 Comparability Analysis

In the paragraphs above, a quick digression on the main characteristics of the different accounting frameworks introduced by IAS 17 and ASC 840 has introduced the matter of the comparability among financial parameters such as EBITDA for companies reporting under different standards. The importance of the matter will be thoroughly discussed among the empirical findings of this dissertation, when the comparability among the current standards (IFRS 16 and ASC 842) is discussed more lengthily. Though, this historical digression is meant to show how financial KPIs' comparability issues have always been a matter of discussion for standard-setters, analysts, and market participants.

Drawing some conclusions from what stated above for both accounting frameworks – even before 2016 – EBITDA figures for companies reporting under US GAAP and IFRS were generally not directly comparable due to significant differences in how leases were accounted

for under ASC 840 and IAS 17. Under ASC 840, leases were categorized as either operating leases or capital (finance) leases, with only capital leases recorded on the balance sheet; on the other hand, operating lease payments were expensed in the income statement, affecting EBITDA. Indeed, IAS 17 distinguished between operating and finance leases as well, with operating leases similarly giving rise to rent expenses and impacting EBITDA. However, the criteria for classification differed: ASC 840 included quantitative thresholds (such as the 75% and 90% tests) for determining lease classification, while IAS 17 focused on the transfer of risks and rewards without specific quantitative benchmarks. These differences meant that similar leases could be treated differently under the two standards, resulting in variations in EBITDA figures and complicating direct comparisons between companies reporting under US GAAP and IFRS.

In conclusion, despite both IAS 17 and ASC 840 treating operating leases in a way that generated rent expenses impacting EBITDA, the lack of comparability in EBITDA figures remained a significant issue due to differing lease classification criteria. The distinct approaches of ASC 840's quantitative thresholds and IAS 17's focus on the transfer of risks and rewards meant that similar leases could be accounted for differently, complicating direct comparisons between companies reporting under US GAAP and IFRS. This historical context underscores the ongoing challenges in achieving financial KPI comparability across different accounting standards.

### 3.5 Pitfalls and Limitations

In 2005, the US SEC reported that US public companies held approximately US $1.25 trillion of off-balance sheet leases (Osei, 2017). As quoted by McCallum *et. al.* (2020), “lease accounting ultimately has the dubious honour of being the most frequently amended financial accounting standard”. Within the existing literature, the most clearly identifiable pitfalls and limitations of both US GAAP and IFRS leasing accounting standards pre-2016 stem from mainly i) the off-balance sheet financing and lack of transparency, ii) the complexity in lease classification, and iii) the non-comparability of financial statements. The same paper – in relation to the criteria adopted by ASC 840 – reports that, because lessees were able to evade the bright-line levels that supported the four "bright line" standards or tests for whether a lease should be capitalized, the accounting standard was unable to stop the flood of off-balance sheet financing (McCallum *et. al.*, 2020). More generally, with a large degree of freedom around which leases could be classified as operating leases, many did not require recognition on the

balance sheet; this lack of transparency allowed companies to keep significant lease obligations off the balance sheet. At the same time, for market participants to compare both income statements and balance sheets of companies reporting under US GAAP versus IFRS, several key differences were present IAS 17 and ASC 840 that impacted comparability, such as the scope, lease classification criteria, treatment of land and building components, accounting for lease renewals, and availability of leveraged lease accounting. In general, under the old standards, companies only had to disclose future rent commitments, which did not provide a complete picture of the lease obligations and their potential impact on the financial statements. The above-outlined limitations are direct effects of a clearly over-simplistic dichotomic framework, uncapable of picturing a much more complex and varied reality such as the one of leasing contracts.

In summary, the key pitfalls highlighted include off-balance sheet financing, lack of transparency and comparability, incomplete disclosures, and complexity in lease classification – which the new IFRS 16 and ASC 842 standards aimed to address.

# 4. IFRS 16: Analysing EBITDA Disruption

## 4.1 IFRS 16: Implementation and Rationale

Under the pressure of criticism from academics, practitioners, and users (Morales-Díaz and Zamora-Ramírez, 2018), in 1996 (McGregor, 1996), the G4+1 – including the former IASC and the FASB, issued a report entitled "Accounting for leases: A new approach". The document contemplated the possibility of abandoning the difference in treatment between finance and operating leases and introducing a new approach to lease accounting whereby operating leases would be capitalized. After the US SEC's recommendation of reconsidering the principles underlying the accounting guidance for leases (SEC, 2005), in July 2006, a joint project IASB-FASB was approved, with the two entities pledging to cooperate on implementing a new lease accounting standard. The boards began conceptualizing and designing a lease accounting model whereby lessees would reflect most of their leases obligations on balance sheet. A first draft of the new standard was issued by IASB jointly with FASB in 2010, and a revised version in 2013. Since its conception, the new leases accounting standard has been receiving criticism, with dissent by financial statement preparers, companies, national and supranational governmental institutions on the usefulness of the model change. The foundation of the criticism against the exposure drafts issued by the boards lied in the concern that bringing once off-balance sheets commitments on books would weigh on companies' credit ratings, potentially leading to an increase in the cost of debt which in turn would finally negatively affect companies' level of investment, a non-desirable outcome – especially in the context of a general economic crisis (Morales-Díaz, Zamora-Ramírez, 2018). After weighing costs and benefits introduced by the new model, the boards finally decided to proceed with its implementation, with the IASB issuing the final standard – IFRS 16, in January 2016, and the FASB releasing its version – ASU No. 2016-02, Leases (Topic 842), in February 2016. The IASB opted for 2019 as the deadline for mandatory first application, while the FASB allowed for more flexibility: 2019 or 2020 depending on whether or not the entity is a Public Business Entity.

In order to decipher the rationale for IFRS 16 implementation, a digression on the purpose of financial reporting is required. In point of fact, stemming from the rationale behind the creation of financial communication institutions and rules, the assessment of the status-quo of the financial reporting usefulness before the beginning of the lease accounting reform process can become a catalyst for reflection upon the reasons why standard setters deemed

necessary such a change and shed light on the structure and mode through which it has been carried out.

The need for financial communication stems from the social utility communities derive from the availability of complete, transparent, timely and relevant information about companies' financial situation. As Wang (2013) highlights, financial disclosure acts as a crucial link between the company and the variety of its stakeholder, because of the role it plays in informing clients, investors, suppliers, employees, institutions, and shareholders about the state of the firm's financial health. As reported by Magli *et. al.* (2018), previous literature has studied the "Positive Accounting Theory" as a tool useful in understanding the purpose and functioning of accounting standards (Watts, Zimmerman, 1978, 1979, 1986). Watts and Zimmermann claim that "one function of financial reporting is to constrain management to act in the shareholders' interest" (Watts, Zimmerman, 1978, 113). One of the most studied topics in corporate finance theory is the "agency theory": the principal is subject to the agent's actions consequences without being able to fully exert control on what the agent does. To an additional extent, the principal is subject to the consequences of actions undertaken by agents with potentially different risk-reward profiles. By virtue of the nature of the role they are appointed to undertake, agents (managers) are better informed than principals (shareholders) about the level of effort they exert, investment opportunities, and firm's financial situation (Brown, 2011). In order to confront the asymmetrical information problem arising from different duties and responsibilities of principals and agents, the need for financial reporting materialized. In fact, transparent, complete, and accurate financial communication has the potential to act as a bridge between the interests of each party of the agency contract. In order to be effective in their purpose of bridging the informational gap between the interests of the parties, the accounting standards ruling the way financial information is sourced, created, managed and communicated must possess features such that higher quality of information is assured through accurate, comprehensive, and timely financial statements (Brown, 2011), and better comparability between companies within the same sector is granted through rules that avoid excessive room for discretion such that two substantially similar companies may appear as pronouncedly different due to formal choices. Due to the criticality of the function fulfilled by accounting standards, it should be no surprise that standards setters are constantly subjected to the pressure of lobbies representing different classes of interests. However, the way accounting standards are conceived, articulated, and communicated has the potential to undermine the purpose for which they are needed. If not structured in the appropriate way, accounting

standards may fail in their attempt to avoid behaviours resulting in outcomes utterly antithetical to the principles of transparency, accuracy, and completeness that accounting rules should promote, due to the personal incentives of decision makers. In order to garner a measure of the extent to which the perverse incentives generated by loopholes in financial accounting standards can degenerate, consider that a 2005 research from the U.S. SEC estimated operating lease commitments not recognized in US financial statements to be approximately $1.25 trillion (SEC, 2005). A similar survey conducted by the IASB in 2015 revealed off-balance sheet commitments related to operating lease commitments for 14,000 listed companies amounting at $2.86 trillion (Magli *et al.*, 2018). Taking into consideration the size of the problem, standard setters conduced further research on the significance of the discrepancy of the status-quo with respect to the ideals to which financial reporting is rooted in. Results showed that firms that had faced financial distress culminating in bankruptcy increased the use of operating leases extensively to finance their operations in the years before the collapse.

In such a state of the world, financial accounting reporting fails in its attempt to communicate faithfully companies' financial situation, allowing outcomes characterized by lack of transparency and comparability between companies in the same industry adopting two different policies regarding the possession of property, plant, and equipment necessary to conduct their business. Consider the case of two airlines (Magli *et al.*, 2018), where one owns the aircrafts, while the other leases them under operating leases contracts. Assets and liabilities of two companies operating in the same business are not comparable because – for the purpose of financial statements redaction, a principle is applied that introduces a distinction between two substantially identical cases based on a merely formal contractual arrangement. Gaining consciousness of the failure of the current lease accounting method, standard setters began working on a solution that would uproot the causes of the problem: it should no longer be possible not to recognize on financial statements all assets and liabilities arising from a lease. By doing so, the new standard would promote better transparency, comparability and reduce the crafting and use of structured contract formulated in such a formal way to result legally in a commitment not bound to be represented on financial statements. On March 2017, the European Financial Reporting Advisory Group ("EFRAG") endorsed the new standard, IFRS 16, arguing that "[…] IFRS 16 meets the qualitative characteristics of relevance, reliability, comparability and understandability required to support economic decisions and the assessment of stewardship, [and] leads to prudent accounting […]". As a revolutionary development though, IFRS 16 will impact substantially the way financial statements are

thought, devised, redacted, and interpreted. The following chapter will scrutinize the main technical consequences of IFRS 16 on financial statements.

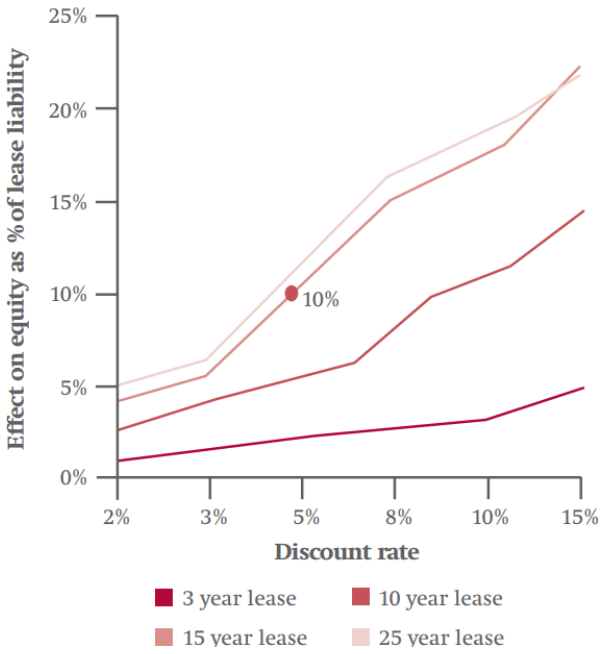
## 4.2 Main Accounting Implications

The following chapter will dive into the analysis of the impact that the reform of lease accounting standard discussed in the previous chapter has on financial statements under IFRS 16. Before delving into the details of the analysis of the materiality of the consequences of the new lease accounting method, it is useful to embark on an initial digression on the definition of lease and on the main terms of the new standard, in order to assess the mechanics of its impacts more holistically. As per definition of the IFRS 16 standard: "*a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration*" (IASB, 2016). In the new definition of lease can be found the essence of the radicality of the change introduced by the new standard: the definition of leases is no longer connected to the classification in either finance or operating. It is no longer a question of "substantial transfer of risks and rewards" but of "right to control". It is exactly this difference in the guidance to the definition that does not allow anymore not to report on balance sheet operating leases in the name of the fact that there was no potential for the transaction to identify as an operation economically similar to the acquisition of the asset object of the contract. The extent of the magnitude of the change in accounting requirement is substantial only for the lessee party of the contract. Lessor accounting does not change substantially. According to IASB, and reflecting on the rationale behind the reform, the main issue IFRS 16 was conceived to resolve had origins in the discretion allowed to the lessee when deciding how to treat operating leases. To this extent, the costs connected to the change were lower than the benefits for lessee accounting, but not for lessor. Accordingly, a lessor will continue to make a distinction between finance and operating leases and account for them differently. The main enhancement of IFRS 16 with respect to IAS 17 as for lessor accounting is the additional requirement of disclosure of information on the risk management of the residual interest in the assets object of a leasing contract. As for former lessee accounting, a company is required to recognise all assets and liabilities related to a lease contract, initially measured at the present value of unavoidable future lease payments; to subsequently represent in the statement of income the depreciation of the asset and liability over the lease term; and make a distinction – in the statement of cashflows, within the cash outflow related to the payment of the lease, between a principal and an interest portion (IASB, 2016). In its constant mandate of promoting and ruling on financial accounting standards changes only when and

where the related benefits are significantly higher than the related costs, the IASB allows for two exemptions from the obligation of reporting on books imposed by IFRS 16. It is the case of short-term leases i.e. leases of 12 months or less, and leases of low-value assets, with the latter being defined as assets that would have a capital value of USD 5,000 or less.

On the balance sheet, IFRS 16 prescribes the recognition of the right-of-use of the leased asset, a non-current financial asset and – if lease payments are made over time, of the related lease liability, partly current and partly non-current financial liability, according to the terms of the lease payment schedule. By analysing the way these two items on the statement of financial position contribute to the formation of the annual result of each of the years of the lease term, one is better positioned to assess their evolution over time. On the one hand, the right-of-use asset is typically depreciated on a straight-line basis; on the other hand (Stencheva-Todorova and Velinova-Sokolova, 2019), the evolution of the lease liability item is subject to two diametrically opposed forces: the reduction of the carrying amount generated by the lease payment made and the increase caused by the passive interest calculated on the decreasing carrying amount (therefore, decreasing too). As a result, being the asset exclusively diminished and the liability partly increased and partly diminished, the carrying amount of the right-of-use asset will decrease faster than that of the connected liability. Therefore, this imbalance will have a direct impact on the change in equity. Despite the right-of-use asset and the lease liability being equal at the beginning and at the end of the lease term, due to the different forces acting upon their evolution in time, the speed of decrease of the asset will prevail on that of the liability, the carrying amount of the asset will be lower than that of the lease liability, with a consequent reduction in equity over the term of the lease. As a consequence of the application of IFRS 16, therefore, companies with substantial off-balance sheet operating leases under IAS 17 will witness a reduction in reported equity. However, in order to assess the impact that the implementation of the change in question may have on the behaviour of decision makers and stakeholders interested in the preparation and use of financial statements, it worth noting that the magnitude of the impact on reported equity depends on the interaction of such variables as the implicit discount rate and the term of the lease. As per an IASB study (2016), the effect on equity as a percentage of lease liability – for various evenly distributed portfolio of leases i.e. portfolios in which in each period the same number of leases with the same terms and conditions end and start, increases in the term of the lease and in the discount rate.

**Figure 1**




Source: Effect Analysis | IFRS 16 *Leases* | January 2016

As for the effects on the income statement, it is crucial to make a distinction between the impact from the perspective of the individual lease and that from a portfolio of leases view. For an individual lease, over the overall lease term, the total amount of the sums of the income statement items under IFRS 16 – depreciation and interest expense, equals the total amount of expense that would have been recognized under IAS 17. However, at each one period over the lease term, the sum of depreciation and interest expense will differ from the expense that would have been recognized under IAS 17. Such a result stems from the interplay of such variables as the length of the term, timing of the payments, and implicit rate. Following a line of reasoning similar to that already employed when analysing the interconnection of the dynamism of right-of-use asset and lease liability, one can realize that on the one hand the depreciation of the leased asset follows a straight-line schedule – while on the other hand, the interest expense decreases over time, being it calculated on the decreasing carrying amount of lease liability. As a result, as shown by a IASB analysis of leases ranging from three to forty years and with discount rates from two to twenty percent (2016), at the beginning of the lease term the sum of depreciation and interest expense will be higher than the constant, straight-line expense that would have applied under IAS 17; while, at the end of the lease term, the latter will be higher than the former. At some point over the life of the lease contract, an inversion will happen whereby the sum of depreciation and interest expense under IFRS 16 will become equal to the hypothetical expense under IAS 17, to subsequently fall beneath it. At such a point, that the IASB (2016) pinpoints after the midlife of the lease contract, the

difference in the carrying amount of the right-of-use asset and lease liability will peak; after that, indeed, the upward pressure exercised by the interest component on the carrying amount of the lease liability will have decreased enough so that the speed at which the lease liability decreases will become higher than that of the right-of-use, after having been lower before such point, so that the two carrying amounts will equal each other at the end of the term. When assessing the impact of IFRS 16 on the income statement from a leases portfolio perspective and leveraging the assumption of evenly distributed leases portfolio, however, the IASB shows that the effect from adopting the new standard should be neutral. At every moment in time, in fact, the portfolio will have equal proportions of leases with different maturities and, some leases will present a sum of depreciation and interest expense equal to the hypothetical straight-line expense under IAS 17; some will have a sum of depreciation and interest expense lower than the hypothetical straight-line expense under IAS 17, and the remaining leases will have a sum of depreciation and interest expense higher than the hypothetical straight-line expense under IAS 17 by exactly the same amount the other group has it lower. Overall, the varying expense levels across different stages of the lease terms balance each out, which leads to a total recognized expense under IFRS 16 equal to the total what would have been recognized under IAS 17. The higher expenses in early lease years are offset by lower expenses in later years, with the in-between leases being close to the straight-line level. Releasing the assumption of evenly distributed portfolio, IFRS 16 may have an impact on the overall income statement result also for those companies that hold a portfolio of leases at any one time. However, this precise outcome enhances the comparability between firms that finance their business activities with leases and those who, instead, opt for buying assets. A company that buys its own assets by taking on a loan will indeed – on the one hand, incur an income statement item of depreciation, constant over time, and on the other hand an interest expense which decreases over time. In the scenario under which a similar company financed its asset through operating leases not recognized on books (IAS 17) the dynamism of the evolution of the negative income statement items would be lost, being it represented only through a straight-line operating expense. With IFRS 16, instead, as in the "buy" case, a higher total sum of depreciation and interest expense will be recognized in the early years of the lease term – which will later decrease over time. The higher the number of leases a company has, the stronger the portfolio effect will be; the stabler the total number of leases a company has, the closer its leases portfolio will be to the ideal evenly distributed portfolio, the lower the significance of the impact of IFRS 16 will be, as shown by testing made by IASB and FASB (2016). As for the interpretability of the figures in the income statement, the IASB conducted

a research (2016) on a sample of 1,145 companies which at the time of the study accounted for more than 80% of the present value of total off-balance commitments related to operating leases "i.e. USD 1.83 trillion of a total of USD 2.18 trillion". The study showed that for two thirds of the in-sample company, the profit margin (profit before interest and tax to total revenue) increased by less than 100 basis points. From the perspective of a financial analysis by investors and analysts, the significance of such an impact varies depending on the industry the company is classified in. For certain industries, such a change is not significant in relative terms to the overall size of the profit margins. However, in other industries where the profit margins are tighter, an even less than 100 basis points change may significantly affect the noteworthiness of conclusions derived from financial statements prepared under the new standard.

On the cashflow statement, according to IASB's effect analysis (2016) the effects of the application of IFRS 16 derive from the requirements of the new standard in regard to the presentation of cashflows related to leases previously held off-balance sheet under IAS 17. In particular, IFRS 16 prescribes the cash outflows related to principal repayment of the lease liability to be included within cashflows from financing activities; the interest component of the total cash outflows will instead be classified according to the requirements for the other interest paid, consistently with IAS 7 (Statement of Cash Flows). As a result, the IASB does not expect the total cashflow to change as a consequence of the introduction of IFRS 16. Indeed, the main differences with respect to the status quo ante will be an increased total cashflow from operating activities, as an effect of the reclassification of what was once the *operating* expense through which off-balance sheet operating leases concurred to the net income formation. IFRS 16 will decrease the operating cash outflows and increase the financing ones: at the very minimum the principal component of the total lease-related payment will be reclassified as a financing cashflow. Depending on whether or not the company opts for considering the interest portion a financing-related cashflow as well, the total translation of cash outflows from the operating to the financing section of the statement of cashflows will be more or less pronounced.

After having examined the material effects IFRS 16 will have on the three financial statements, it is more straightforward to understand the consequences the new standard will have on key metrics and financial ratios typically used by investors and analyst when analysing the financial performance and health of a company. The overall effect on the balance could be summarized in the recognition of a previously unrecognized asset, liability, and consequent

decrease in report equity. On the income statement, there will be a transformation of the former operating expense into depreciation and interest expense, which in turn – on the cashflow statement will translate into an increase in operating cashflows and decrease in financing cashflows. As a consequence of the application of the new standard, an increase in leverage is expected, as an effect of the increase in liabilities and decrease in reported equity. Rompotis, G. and Balios, D. 2023 performed a research in 2023 on the impact of IFRS 16 in the financial statements of 79 Greek companies which confirms this expected result, with an average percentage increase in leverage ratio of 2019 compared to 2018 of 10%. While the increase in assets and liabilities is the mechanical consequence of the recognition of previously unrecognized stock items, Ribeiro, Ribeiro and Ribeiro (2023) show – for a sample of 14 airlines in Europe and South America, that the increase in the weight of liabilities in 2019 (after IFRS 16 introduction) over the sum of 2018's (before IFRS 16 introduction) and 2019's is higher than that in the weight of 2019 assets (from 42.8% to 57.2% for liabilities, vs. from 44.6% to 55.4% for assets). The same study highlights how the rate of change in the aforementioned measures may depend on the size of the company forced to the accounting requirement change. Despite assets and liabilities increasing for all the companies in sample, the researchers show how the increase is markedly higher for small and medium sized company, compared to larger ones. As a consequence of the different order of magnitude of the changes in asset, liabilities, and equity among companies with different sizes, the IFRS 16-inducted decrease in equity ratio (Equity/Assets) results more significant for smaller size companies. The result is reconducted to the tendency of companies to engage in operating leases financing activities depending on their size: the research highlights that grouping companies based on their size, an indirect selection of companies that rely more or less heavily on operating leases as a mean to finance their assets is made, and consequently a distinction is showcased in the ability of companies to absorb shocks related to IFRS 16 depending on their size. Moving onto metrics that involve insights deriving from flow measures, a decrease in Asset turnover (Revenues/Total assets) is expected, given the recognition of the new right-of-use asset; an increase in EBITDA and EBIT is expected and materializes ex-post (Rompotis G. and Balios, D., 2023), with the former increasing more than the latter, given how the once operating expense is now partly depreciation – after EBITDA, and before EBIT, and partly interest expense – after EBIT. According to IASB, the impact on net income or loss depends on the characteristics of the lease portfolio and tax rate (Stencheva-Todorova and Velinova-Sokolova, 2019), and in turn, the impact on all the profitability metrics such as ROE and EPS – that derive from such the net result of the year, cannot be determined a priori either.

This chapter – by analysing the reasoning behind the mechanical accounting impacts of IFRS 16's implementation, first by studying the effects analysis issued by the IASB, then backing the theoretical reasoning with the results of ex-post studies, has laid the foundation for the analysis and research that will be developed in the following chapters, more directed towards theoretically and empirically assessing the implication of the impacts of IFRS 16 implementation on the significance of the conclusions that it is possible to draw from analysing financial statements.

## 4.3 IFRS vs US GAAP: a New Comparison

Academic literature has long questioned about the issue inherent in the right number of accounting standards sets. The simple theory of standard races (Farrel and Saloner, 1985; Katz and Shapiro, 1985) provides a standardised framework through which to analyse the conditions under which a single accounting standard may be more desirable than a variety of different accounting frameworks. The academics show that under the conditions of scarce demand for variety of accounting standards sets product, upper bound of network effect, and no risk for competition, a unitary standard may be more coveted than a plurality of sets. However, Meeks and Swann (2011) argue that the first and the last conditions are unlikely, although not impossible; while Swann (2002) argues that the condition relative to the upper bound of network effects is highly implausible: the marginal utility of an additional user in the network decreases in the number of total users. Further, Swann (2007) develops a model for the analysis of different variety-reduction frameworks. Notwithstanding the fact that the results rely on the parameters taken into account, the general conclusions appear to suggest that a single accounting standard is insufficient in generating enough variety: the fact that different markets may encompass different varieties of possible usages implies that a single standard is not sufficient. There should be no surprise, therefore, in acknowledging that – despite the globalisation of served markets that prompted the standardization of financial accounting, two major frameworks have established themselves as the global standards in accounting standards setting: US GAAP, by FASB on the one hand, and IFRS, by IASB on the other. By using the number of companies using it as a criterion to measure the importance of the given accounting framework, IFRS is predominant, with more than 27,000 of approximately 49,000 domestic companies listed on the 88 largest securities exchange in the world using IFRS Standards (IFRS, 2017). By switching to the market capitalization of adopters as a metric of the breadth of adoption of the given accounting framework, US GAAP prevails, given the greater relative size of companies adopting it, mainly as a consequence of the fact that of the 10 biggest companies

in the world by market capitalization, 80% are US-based (Companiesmarketcap.com, 2024). Nonetheless, in principle, costs incurred as a consequence of the diversity of accounting frameworks used in different jurisdictions shall not be neglected. Exemplary, in this regard, is the case of Daimler Benz, a German company that, as a result of having to disclose its net income figures under both German and US standards in order to comply with the requirements necessary for listing its shares on NYSE, showed a figure of 615 DM million under German GAAP and – 1,893 DM million under US GAAP (Nobes, 1997). Being mindful of the extreme consequences that differences in financial accounting rules may lead to, despite the diversity of legal and political systems, levels of education, and cultures may lead to heterogeneity in the way accounting frameworks are conceived and implemented, since the second half of the twentieth century, significant harmonization efforts have been exerted in the direction of convergence between the standards issued by the IASB and FASB. Lease accounting is no exception. Already the forerunners of the current IFRS 16 and ASC 842 – IAS 17 and SFAS 13 (incorporated into ASC 840 in 2009) respectively, showcased key points of similarity. According to both standards, payment of leases classified as operating appeared in the statement of income as an expense, therefore not resulting in on balance sheet stock items. Conversely, in the circumstance of a finance lease, an asset and corresponding liability would be recognized on balance sheet. Already resembling each other the lease accounting standards by them issued, and in an effort to undertake that reform process induced by the fervent criticism of the consequences the old standards led to, in 2006 the IASB and FASB decided to add lease accounting as a joint project in their agenda (Saher, A. 2012). The two standard setters have reached broadly similar formulations as for the accounting treatment of leases: both IFRS 16 and ASC 842 recognize that – for lessees, the right of use of the leased asset is classifiable as an asset, while the obligation to fulfil future lease payments is classifiable as a liability. In the same manner, the IASB and the FASB have reached the same conclusion in regard to lease definition and most part of the lease liability measurement mechanism. Furthermore, both boards decided to keep the reporting prescription previously applying to lessor accounting, resulting in two standards substantially identical from the accounting point of view. Nevertheless, divergencies among the two standards do exist. The main point of disagreement between the two boards is the uniformity of accounting for different types of leases: the IASB opted for accounting all types of leases in the same way previously classified finance leases were accounted for; the FASB preserved the distinction in accounting between finance (previously on balance sheet) and operating (previously off-balance sheet) leases, *from a lessee' standpoint*. The lessor party, under ASC 842, classifies leases under three different categories:

sales-type, direct financing, or operating (PWC, 2024). A contractual arrangement that transfers control of the underlying asset to the lessee is classified as a sales-type lease which gives rise to the recognition of a sale and related profit upon commencement of the lease term. Under ASC 842, a lessor can classify a lease as a finance one even though the control of the leased asset is not transferred: it is the case of the circumstances under which a party other than the lessee offers the lessor a guarantee of the residual value. In this case, the lease arrangement is classified as direct financing by the lessor and as operating by the lessee. Therefore, under ASC 842, leases that transfer control of the leased assets are finance lease for the lessee and sales-type leases for the lessor. For a lessee, a lease that is not a finance lease is an operating one. And the key distinction, also in terminology, with the IASB model is that – for IFRS – all lease types transfer the right to control the use of the leased asset. For the FASB model, instead, only operating leases transfer the sole right of control the use of the leased asset, with finance leases transferring the asset itself. Under IFRS 16, the lessor continues to classify leases arrangements as either operating or finance. Under ASC 842 the classification of leases depends on the five criteria listed by ASC 842-10-25-2, according to PWC (2024): (a) transfer of ownership of the underlying asset to the lessee by the end of the lease term; (b) granting to the lessee of an option to purchase the underlying asset that the lessee is reasonably certain to exercise; (c) lease term being for the major part of the remaining economic life of the underlying asset; (d) present value of the sum of all lease payments and any residual value guaranteed by the lessee, not otherwise included in the lease payments, being substantially all of the fair value of the underlying asset; (e) underlying asset being of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. If any of these criteria is met, then, the lease is a finance lease for the lessee and a sales-type lease for the lessor. If no one of these is met, the lease will be classifiable as operating by the lessee. If both (d) and (f) "it is probable that the lessor will collect the lease payments plus any amount necessary to satisfy a residual value guarantee" are met, then the lease will be a direct-financing lease for the lessor (and an operating one for the lessee). Under this circumstance a component of assessment of the probability of collecting the lease payment by the lessor is introduced. If neither (d) nor (f) are met, then the lease will be an operating lease for both the lessee and the lessor. Aware of the certainly not one-to-one correspondence between IFRS 16 and ASC 842, for the purposes of the present paper, the following paragraphs will address the analysis of the accounting differences between the two standards and the assessment of their potential impacts on the representativeness of the information disclosed in financial statements.

As per IASB's 2016 effect analysis, the main differences between IFRS 16 and US GAAP's new model can be analysed by scrutinizing their consequences per main financial statement. Starting with the statement of financial position, the differences can in turn be grouped into recognition, measurement, and presentation distinctions. Both standards prescribe the recognition on balance sheet of all leases, but while IFRS 16 contemplates exemptions for leases of 12 months or less and leases of assets that would have a capital value of USD 5,000 or less, the US GAAP's analogue does not envision the latter. Nonetheless, the expected impact of such a difference is expected to be sufficiently negligible for most companies, a result that moves towards improving the trade-off benefits-costs of worsened comparability resulting from the difference between the standards. With regard to the measurement of lease assets, according to the IASB model, companies typically depreciate the amount on a straight-line basis, while the FASB's alternative contemplates a slower pace of depreciation in the earlier years of the lease term for former off balance sheet leases. Under IFRS, the periodic depreciation is calculated by dividing the opening balance of the Right-of-use (ROU) Asset – with the first ever balance calculated as the sum of the present value of all future lease payments and initial direct cost, by the number of periods within the lease term. The result is the constant amount that, in each period, decreases the ROU Asset. Under ASC 842, instead, the periodic variation of the ROU Asset follows a different pattern. The first ROU Asset opening balance is analogously calculated as the sum of the present value of all future lease payments and initial direct cost. The difference in the periodic decrease pace stems from on the one hand, the different gross periodic decrease of the ROU, calculated as the division of the sum of the initial direct costs and the gross *non-discounted* value of all the future lease payments (as opposed to the discounted amount in IFRS) by the number of periods within the lease payments. By effect of this gross decrease component only, the FASB alternative would lead to a faster depreciation of the ROU Asset, being the gross periodic decrease calculated on a non-discounted basis as opposed to the IASB principle. However, the effect of the interest matured on the opening balance of period of the lease liability has to be taken into account so as to calculate the total net periodic decrease in the ROU. While the first component, the gross decrease, pulls down the carrying balance of ROU, the interest component contributes to increasing it and, crucially, it does that by a greater extent than the measure by which the gross decrease under ASC 842 is higher than the straight-line recurring depreciation, therefore resulting in a smaller (and slower, in the initial phases) net periodic decrease. The just analysed phaenomenon holds true throughout the lifetime of the lease term up until the point in which the difference between the carrying amount of the ROU under ASC

842, higher, and the ROU under IFRS, lower, peaks. ASC 842's overtake on IFRS 16 in speed of depreciation will happen when the periodic interest payment, decreasing over time, will no longer be great enough to mute the opposite in direction, higher, periodic, decreasing component. Despite the inversion of tendency in the relative speed of the decrease in the ROU assets between the two different standards – however – as outlined by IASB's effect analysis, the carrying amount for under the U.S. rule is expected to be always higher than under the IFRS counterpart. As a consequence of a higher carrying value for the ROU asset under ASC 842, the reported equity too is expected to be higher. This happens to be the case because, on the flip side, the lease liabilities are identical in each period under both standards. Under IFRS 16, indeed, the original amount – equal to the present value of all future lease payments (not including initial direct costs, unlike the corresponding asset), by period in period is decreased by the amount of the gross value of the periodic lease payment and increased by the amount of the interested calculated on the opening balance net of the periodic lease payment. The difference among the two standards in the treatment of assets does not exist for the lease liability: under US GAAP's ASC 842, the evolution pattern of the lease liability is the same as under IFRS 16. The only minor measurement difference among the two standards in regard to the lease liability is that under ASC 842, the adjustment to the lease liability in response to a change in the index or rate leases payments are linked to is not envisioned, not constituting reassessment event; while under IFRS 16, the lessee remeasures the leases liability (and asset) whenever there is an alteration with respect to the contractually established cashflows (KPMG, 2022). The main difference in regard to the lease liability concerns a matter of presentation rather than one of measurement. Indeed, under both standards, the lease liability meets the definition of financial liability, but ASC 842 prescribes a presentation in different line items for lease liabilities originating from former on- and off- balance sheet leases. IFRS 16, instead, relies on IAS 1 requirements: financial liabilities have to be presented as separated from other liabilities and additional line items are required only when such a distinction is relevant to the understanding of the status of the company's financial position. Staying within the context of balance sheet's presentation differences and moving back to the treatment of the ROU asset under the two standards, the line of thought is identical to that applying to lease liabilities' presentation. Therefore, the US GAAP standards will require to separately present lease assets originating from former on- and off- balance sheet leases; IFRS requires lease assets to be recorded in a separate line item – rather than within the owned property, plant, and equipment aggregate – only when such a separation is relevant to the understanding of the status of the company's financial position.

Moving to the analysis of ASC 842 – IFRS 16 differences in the realm of the statement of income, the IASB expects the profits before interest (e.g. EBITDA and EBIT, although not GAAP measures) to result higher under IFRS 16 rather than under FASB's model. Contrary to what discussed in the previous section in terms of "reclassification" by IASB's standard of the former operating expense for operating leases previously held off balance sheet into depreciation and interest cost, ASC 842 prescribes the entire negative income component relative to former off balance sheet leases to be comprised within operating expenses, before operating profits. The point is crucial, and it ties back to the core difference between the two standards: IFRS 16 requires a company to account for all leases in the same way; ASC 842 still recognizes the difference between operating and finance leases despite both standards are finally recognizing all lessee's lease assets and liabilities on books. The US GAAP philosophy does not prescribe any change in regard to the negative income components related to operating leases. As a result, *ceteris paribus*, the implementation of the two standards for two otherwise identical companies to which, however, the two different set of accounting rules apply, will result in higher EBITDA and EBIT for the company under IFRS than the US GAAP-ruled counterpart. Overall, as an effect of holding a portfolio of leases – under IFRS 16 – the comparability with ASC 842's profit before tax is restated by the effect of the phaenomenon thanks to which the impact on the last aggregate before tax on the income statement is negligible, yielding a profit before tax that, as the FASB model counterpart, is sufficiently reasonably unchanged with respect to the status quo ante standard reform. For the exact same reason just explained – under ASC 842 – on the cashflows statements, the effect of decrease in operating cash *outflows* and corresponding increase in financing cash *outflows* is not present. Indeed, cash outflows related to leases previously held off balance sheet are classified as operating under the FASB model. On the other hand, IFRS 16 at the very minimum produces the reclassification of the principal repayment component of the whole lease payment as financing, with the interest portion being classifiable as either operating or financing. Following a line of reasoning similar to that employed in analysing the differences of the impacts of the two standards on the earnings before tax aggregate, the overall change in total cash flows is expected to be immaterial for most companies under both standards.

As a result of the effect analysis just performed, it is evident that ASC 842 brings about a change only on the statement of financial position, leaving the statement of income and the cashflows statement unaffected. IFRS 16, conversely, impacts all three major financial statements. As a consequence of differences in measurement and presentation of items to be

reported on the financial statements, the two standards will inevitably lead to differences in the interpretability of key financial metrics. IASB's effects analysis focuses its remarks on financial leverage and performance metrics. The Debt to EBITDA ratio under IFRS 16 will be lower than that under ASC 842, as a result of the IASB model's increase in EBITDA stemming from the recognition of the negative income component related to leases previously held off balance sheet partly in the form of depreciation, and part in the form of finance cost, both of which are not included in the EBITDA calculation. The Interested Coverage Ratio defined as the ratio EBITDA to net finance cost under IFRS 16 will be impacted on both the numerator and the denominator. However, the increase in net finance cost is expected to be proportionally greater than that in EBITDA resulting – for two otherwise identical companies – in a lower Interest Coverage Ratio under IFRS than under US GAAP. On the evaluation of performance side, Return on Capital Employed (ROCE), defined as the ratio Net Operating profit After Taxes (NOPAT) to Average Capital Employed (CE), is expected to be higher under IFRS 16. Indeed, under the IASB's model the operating profit increases; under the FASB's counterpart, it stays constant. The capital employed increases under both standards, as a result of the recognition on books of commitments previously held off balance sheet.

On the trade-off benefit vs. costs of each one standard, some preparers argue the FASB model to be less expensive than the IASB's, because of its impact on the balance sheet only, rather than the more pervasive effects of IFRS 16 on all the three main financial statements. Other classes of interests embrace the opposite school of taught by arguing that on the longer term IFRS will prove to be less expensive than the US GAAP's counterpart thanks to the more straightforward unitary classification model, the fact that the same information systems used for other fixed assets classification can be used for leases, and the provision of the exemption for low-value assets. Beyond the ideological proclamation, however, one thing is certain: the material differences between IFRS 16 and ASC 842 have the potential to significantly impact the way financial statement preparers deal with the messages these documents are supposed to transmit, and financial statement users handle the information that financial statements convey and interpret the conclusion that by them it is possible to extrapolate. The following sections, in particular that relative to our empirical analysis, will therefore investigate and analyse the materiality of the consequences of such differences, scrutinize the direct impacts these have on analysts' day-to-day work, and ultimately offer a measure of the appropriateness of such developments.

## 4.4 New EBITDA Definition: Analysis of the Disruption & its Consequences

EBITDA, acronym for Earnings Before Interest, Taxes, Depreciation, and Amortization is a non-GAAP performance metric vastly used for different purposes, among which performance evaluations, solvency analysis, and corporate valuation stand out (Bouwens, J. *et al.*, 2019). Its definition as an earning measure before adjusting for the impact of depreciation and amortization – two of the main non-cash financial aggregates, made EBITDA popular starting in the '80s, during the upsurge of the leveraged buy-out industry, where the ability to evaluate target companies' debt service capacities is crucial to assess the merits of an investment opportunity. Henceforth, financial statements users and preparers communities have started using EBITDA both as an internal metric aimed at evaluating the managerial performance, and as an alternative performance measure (APM) to communicate to shareholders. Being it a measure disclosed by firms on a voluntary basis with substantial margins of discretion in its definition and in its amendments, EBITDA has long been object of controversy between investors, analysts, and regulators. Investors and analysts often debate its usefulness and comparability across firms, while regulators are concerned about its potential for misleading financial performance representation due to the lack of standardized reporting. Grant and Parker (2002) point out how EBITDA may be regarded as an estimation of "pre-tax, pre-interest operating cash flows under the assumption that changes in working capital accounts are immaterial". This may be true for companies that have achieved a relative stability in the fluctuations of their account receivables and payables and inventory, a "steady state" which is rarely the case in practice. Disregarding working capital requirements variations is a substantial limit of EBITDA in its acceptation as a proxy for operating cashflows, especially for firms with substantially long cash conversion cycles. Furthermore, EBITDA neglects to take into account any indicator of capital asset usage, as payments to debt holders in the form of interest and capital restitution are disregarded and tax cash outflows are ignored as well, despite both these two stakeholders (debtholders and states) having priority over shareholders in the typical waterfall of payments. Using EBITDA as a proxy for cashflow furthermore ignores any monetary stream related to the need for capital investment for maintaining the current level of operating performance and growth purposes (Capex). Grant and Parker (2002) provide an example of the dynamics underlying the usage of EBITDA for external communication with the case of the St. Joe Company which, in 1997 GAAP annual report, did not include any EBITDA measure while, in the following year, having concentrated investments on real estate and taken on significant long-term debt on balance sheet, started

shifting the focus of its communication toward the introduction of EBITDA, with the usual annual report of 1999 ultimately transformed into a summary of financial information heavily reliant on EBITDA and other APMs. This exemplary case study serves as a warning of the potential perverse incentives decision-makers may have in the external disclosure of information to the market, especially to its less sophisticated and educated segments. The authors acknowledge that while the EBITDA may be used as an internal metric for line managers performance evaluation purposes, whenever the firm wants to base such an assessment on a metric unaffected by capital investment, financing, and tax decisions of which, often, the top layers of management rather than line managers can be held accountable for, its external communication requires extra attention from regulators in order to ensure that no manipulation of receivers happens. Furthermore, reporting EBITDA in the form of a per share metric adds on the potential misleading nature of the messages this way conveyed because, as the SEC specified in a Financial Reporting Release, contrary to metrics for which the expression in the form of a per share amount is reasonable (e.g. net income), other classes of interests' claims are situated between the result provided by EBITDA and the ultimate stockholders' claim, making nonsensical the ratio of EBITDA to the title of the residual claim class of stakeholders (i.e. the shares). The discretionary and non-standard nature of EBITDA, moreover, exacerbate the potentiality for misleading external communications, with firms defining EBITDA according to what allows for a rosier presentation of their financial health and performance. In the light of the inevitable loss of comparability that such lack of standardization in EBITDA definition procures, Grant and Parker (2002) identify two possible solutions to reinstate the uniformity of meaningfulness of such a measure and reduce its idiosyncratic nature. One, cross-sectional, advocates standard setters to mandate how EBITDA should be calculated. The other requires the single firm to calculate and report EBITDA with the same logic and mechanism over the past, present and future. The latter provide a basis for comparison of the firm to itself, over time, minimizing firms' room for manoeuvre in deciding on EBITDA disclosure and definition on a discretionary basis to window-dress their financial performance.

Nevertheless, EBITDA is a powerful tool of financial information interchange. It is often the object of financial performance evaluation in the business press, it is increasingly being used in the definition of financial covenants in debt contracts, and it is often the metric used for the calculation of managers' performance-based variable remuneration. One of the most advocated merits awarded to EBITDA is its nature of "one-stop" measure that

encompasses information on profitability, cash flow generation ability, and debt service capacity (Bouwens J. *et al.* 2019). If on the one hand its non-standardised definition worsens the comparability of the conclusions that it is possible to drawn from its analysis, on the other hand its generally accepted baseline definition adjusts for differences in capital structure and fiscal jurisdictions by adding back interest expenses and taxes, enhancing – to this extent, the comparability across different firms. It is probably its hybrid nature – in between cashflows and earnings, that granted EBITDA its success. In the study conducted by Bouwens J. *et al.* (2019) on a clean sample of 15,895 annual reports and 51,758 press releases extracted from 8-K and 10-K EDGAR filings for all S&P 1500 firms that have been at some point within the timeframe 2005-2016 in the index, on average 14.8% of sample firms cite EBITDA a number of times equal or greater than three in their annual report; 24.8% mention EBITDA at least once, and 7.4% ten times or more. Furthermore, EBITDA disclosure has become always more present in companies' annual reports over time, with a pronounced acceleration in its adoption around the Global Financial Crisis around 2008-2010, with EBITDA being mentioned by 6.6% of the sample firms in 2005 and 33.8% in 2016.

For the purposes of this dissertation, it is crucial to understand the implications of disclosing financial information based on EBITDA. Analysing how this metric is used on an opportunistic basis, being extremely widespread despite its limitation, comprehending what are its limitations is key to link these conclusions to the impact IFRS 16 has on the significance of the metric: does IFRS 16 make EBIDTA more meaningful mitigating its limitations, or does it exacerbate them making it less representative of the financial information users and preparers pretend to – respectively, draw from and convey through it?

Bouwens J. *et al.* (2019) show how on a sample of 162,626 firm-year observations considering all US stock-listed firms between 1988 and 2016, EBITDA-based ratios such as EBITDA margin (EBIDTA/Sales), EBITDA to Total Assets, and EBITDA to Net Operating Assets systematically result higher than any other ratios based on Net Income, Net Operating Profit, Operating Profit (Before tax), Free Cash Flow, and Operating Cash Flow. The extent to which EBITDA ratios result higher than other measures is large and significant with, for example, operating profit before tax and operating cashflow ratios being at least 4% of sales, 4% of total assets, and 7% of net operating assets lower than the EBITDA counterparts. EBITDA ratios are therefore higher than any other measure taken into account for the analysis of the research, providing a rosier outlook for firms' financial performance when compared to other metrics-based ratios. EBITDA outweighs net operating profit for 93% of the firms in

sample, and free cash flows and operating cash flows for 70% and 66% respectively. These results do not surprise: by design, the EBITDA number should almost always be higher than the other considered metrics. What instead must be pointed out is how such a brighter appearance conveyed by EBITDA makes its utilization prone to manipulations aimed at making firm performance look better than what other metrics would suggest. The computation of EBITDA is derived from information that is regularly disclosed and evident in GAAP financial statements. Therefore, EBITDA does not offer significant incremental informational value beyond the insights already obtainable from GAAP financial statements. The underlying data for EBITDA is readily available, thereby rendering the metric a mere reformulation of existing financial information. From a methodological perspective, EBITDA can be viewed as a synthetic metric, synthesizing various elements of the income statement without introducing novel data points. Hence – as Bouwens J. *et al.* (2019) suggest, its widespread utilization is probably to reconduct to the potential for it to enhance the appearance of firms' performance concealing not so satisfying profitability and leverage levels, and overinvestment.

Now, how does the advent of IFRS 16 interface with such a status quo assessment of EBITDA's significance? A 2016 PWC's global study on 3,199 listed companies reporting under IFRS in 51 countries worldwide (excluding the US), analyses the effects of the capitalization of the existing off-balance sheet leases commitments. According to the research, the EBITDA of the studied entities will face an increase with a median of 13%. As outlined in chapter 4.2 an increase in EBITDA is to be expected given how the once rent operating expense has to be "converted" into partly depreciation and partly interest expense, both after EBITDA. As discussed already in this chapter, EBITDA – even before IFRS 16 implementation was a measure far from being exempt from criticism due to its less than accurate, precise, undisputable depiction of a firm's earnings or cashflows. However, due to IFRS 16 the risk is for the mislead to grow even grander, under all the three main lenses through which EBITDA is employed: solvency analysis, corporate valuation, and evaluation of the firm's performance under the assumption of EBITDA being a proxy for cashflows. In particular, the reasoning through which EBITDA was being used as a proxy for cashflows was already flawed: disregarding tax cash outflows and, even worse, working capital requirements variations, is a substantial limit of such an EBITDA employment. Now that what was once the rent operating expense – unquestionably a clear cash outflows, is split into depreciation and interest expense, both after EBITDA and, therefore, the impact of which is not reflected in the EBITDA figure, the gap between the metric and an accurate and precise representation of firms' cashflow is

widened. Consequently, EBITDA now inflates operating performance even more by omitting also the potentially significant cash outflows associated with leases. Such a development can mislead stakeholders about a company's true liquidity and operational efficiency. For companies with substantial lease commitments, the impact on cash flow is profound, as EBITDA no longer captures periodic lease payments. Such a decoupling means that the new EBITDA may present a more favourable picture of financial health than the already prone to window-dressing ancestor, even more so for businesses heavily reliant on leased assets, such as retail, airlines, and logistics sectors. This shift necessitates greater scrutiny of cash flow statements and supplementary disclosures to accurately gauge a company's financial position, further reducing the usefulness of EBITDA as a sole measure of cash flow, and compelling analysts and investors to look beyond EBITDA to metrics that incorporate these critical cash expenditures.

In the light of the matured awareness of IFRS 16 disruption of EBITDA, the following sections and chapter of this dissertation set as an objective the disentanglement of the consequences of such a change on the work, analysis and conclusions that the financial statement preparers' and users' community have to perform and draw when attempting to cope with the disruption of what has been for decades a widely used metric. Will it continue to be?

### 4.5 Study of the Impacts: A Cross-sectional Sector Analysis

Already in the preliminary stages of IFRS 16 implementation, through its 2016 Effect Analysis, the IASB made public that it was aware that the impacts of the new lease standard implementation would differ in magnitude among different industries. Such a difference in the extent of IFRS 16 impact on companies' financial statement naturally flows from the more or less pronounced utilization of former off balance sheet leases, without question varying on the basis of the nature and structure of the different industries' business models. In certain sectors, indeed, leases are more extensively used as an alternative to direct capital investment of ownership, allowing for a leaner and more flexible structure (Morales-Diaz, J. and Zamora-Ramirez, C. 2018). It is the case of the so-called "lease intensive" industries (Fitó *et al.*, 2013), among which retail, hotels, and transportation are prominent. Of the 14,000 listed companies (out of about 30,000) that disclosed information about off balance sheet leases in their latest annual reports at the time of IASB's research (2016), 1,145 companies accounted for over 80% of the present value of the total amount of off-balance sheet operating leases commitments. Cleaning out this gross sample by excluding banks and insurance companies, outliers due to the unproportionate relative bigger size of their balance sheets compared to the other companies

in the sample, the IASB conducted research by comparing the 1,022 remaining companies' ratio of off-balance sheet leases commitments to their total assets. To offer a gauge of the extent to which different companies in different industries employ more or less extensively leases to finance their operations, it is sufficient to consider how for 36% of the retail companies in the sample the aforementioned ratio is greater than 50%, while for all companies in sample in that sector the value is 21.4%. Conversely, for 43% of telecommunication companies in the sample, the ratio is lower than 5%, while for all companies in sample in that sector the value is 6.1%. The selection process which led to the selection of the 1,022 companies stemmed from a first screening based on the magnitude of the representativeness of the present value of off-balance sheet commitments within a broader set of 14,000 companies. This selection already singles out companies whose off-balance sheet lease obligations relatively weight more than others. The result is a sample of 1,022 companies whose breakdown by industry yields a ranking of industries by relative relevance of former off-balance sheet leases, and therefore by materiality of IFRS 16's expected impact. Airlines is the most represented industry in the sample, constituting the 22.7%; it is followed by Retailers at 21.4% and Travel and Leisure at 20.7%. Below the top 3, more distant, Transport ranks at 11.6%. The identified industry impacted the least is Healthcare, with 2.2%.

A PwC's 2016 study on the *minimum* impacts of IFRS 16 on financial ratios and performance measures of 3,199 IFRS reporters entities, based on 2014 operating lease commitments disclosures, focused on the different magnitude of impact across different industries. Confirming mostly the outcomes of the IASB's Effect Analysis, PwC affirms that the industries expected to be impacted the most are: Retail, Airlines, Professional Services, Healthcare, Textile and Apparel, and Wholesale. The median increase in debt for Retailers is expected to be 98%, with 35% of the entities witnessing a +25% increase, confronted with a median increase in EBITDA of 41%. The Airlines' industry will witness a median increase in debt of 47%, with 50% of the entities registering a +25% increase, with an EBIDTA increase of 33%. Retailers' median leverage change is from 1.17 to 2.47, with the median solvency dropping from 40.8% to 27.5%. For Airlines, the median leverage increases from 3.26 to 3.63, with the median solvency going from 25.1% to 19.4% (cfr. **Table 1**). These results are coherent with the understanding that one can derive from the analysis of the business models of these most affected industries: retailers – by virtue of the characteristics of their operational framework, can lease a substantial portion of their physical stores; airlines, likewise, can lease aircrafts, assets that due to their transportability are well-suited to be the subject of a contract

that theoretically encompasses the potentiality of returning the leased asset to the original owner at the end of the lease term.

**Table 1**

| Industry | Debt %Change | EBITDA %Change | Leverage %Change |
|---|---|---|---|
| Retail | 98% | 41% | 111% |
| Airlines | 47% | 33% | 11% |
| Professional Services | 42% | 15% | 81% |
| Healthcare | 36% | 24% | 38% |
| Textile and Apparel | 28% | 18% | 28% |
| Wholesale | 28% | 17% | 13% |
| Transport and Infrastruc | 24% | 20% | 14% |
| Entertainment | 23% | 15% | -27% |
| Telecommunications | 21% | 8% | 21% |
| Lodging | 16% | 9% | 19% |
| Industrial | 14% | 9% | 7% |
| Construction | 14% | 8% | 2% |
| Chemical | 13% | 6% | -3% |
| Food and Agriculture | 12% | 7% | -4% |
| Pharmaceutical | 8% | 5% | 5% |
| Broadcasting | 7% | 11% | -9% |
| Financial services | 6% | 3% | -13% |
| Real estate | 6% | 1% | -18% |
| Extractive companies | 4% | 3% | -200% |
| Utilities | 2% | 2% | -9% |

Notes: Reported %Changes are sectors' median %Changes

Source: Authors' elaboration of PwC (2016)

To the mechanical economic impacts on key financial ratios and performance measures, practical and operational impacts on companies' business operations must be added. For retailers, for example, considerations on the optionality for renewals, linkage of variable payments to indexes and rates, and separation between lease and non-lease elements have now to be taken into account (PwC, 2016). Under IAS 17, operating leases were off-balance sheet items, and the financial implications of renewal options were largely deferred until the actual renewal. IFRS 16 mandates the inclusion of renewal options in the lease term if it is reasonably certain that the lessee will exercise these options i.e. an economic incentive exists to do so. This determination requires substantial judgment and robust estimation techniques. Retailers must now employ estimation techniques to predict the likelihood of lease renewals, adding subjectivity and judgement to the figures ultimately displayed in the financial statements. Under IAS 17, variable lease payments tied to an index or rate, such as the Consumer Price Index (CPI), were recognized in the profit or loss account as incurred. This approach required minimal forward-looking estimations. IFRS 16 necessitates now these payments to be

estimated and remeasured at the spot rate for each reporting period. Such a condition introduces a substantial complexity in financial reporting, compelling retailers to develop and implement systems capable of continuous estimation and remeasurement of variable payments, at the advantage – it must be acknowledged, of financial statements' accurate reflection of the current and future obligations under variable lease payment arrangements, enhancing the granularity and accuracy of financial reporting. Finally, IFRS 16 requires the disaggregation of lease components from non-lease components, such as administrative, utilities, and marketing charges. Such a passage is critical for accurate financial reporting, as the lease component is capitalized on the balance sheet while the non-lease component is expensed as incurred. Retailers must undertake detailed – and presumably costly, contract analysis and implement new accounting processes to ensure compliance with this requirement. The counterbalance is, even in this case, an enhanced transparency and alignment of the financial representation with the economic substance of the transactions. These requirements, which may appear on the surface operational only, can translate into actual costs in monetary and time resources that, combined with IFRS 16's mechanical impacts on financial statements, exacerbate potential differences in analysis' comparability of companies (and therefore industries) which relied on off-balance sheet leases the most.

Morales-Díaz and Zamora-Ramírez (2018), in order to estimate the potential impact of IFRS 16 in the generation of lease assets and liabilities on balance sheet, defined the ratio lease expense to total liability as a proxy of the industry-specific estimated lease intensity. The authors predicted that those sectors with a higher lease intensity would be impacted more by IFRS 16's implementation. According to their result (cfr. **Table 2**), the higher expected IFRS 16 impact is projected for Retail, Hotels, and Transportation, in order. It must also be noted, however, how crucial is the definition of the measure according to which the magnitude of

IFRS 16 impact is measured. In this example, the authors use the ratio lease expense to total

**Table 2**

| Sector | Leas.exp/ Liab |
|---|---|
| Banks and Insurance | 0.001 |
| Real State, Consumer Durables & Apparel, Commercial & Profes. Serv. | 0.006 |
| Household & Personal Products | 0.008 |
| Utility-Energy-Gas | 0.011 |
| Diversified Financials | 0.011 |
| Materials | 0.012 |
| Pharmaceuticals, Biotechnology & Life Sciences | 0.015 |
| Automobiles | 0.016 |
| Food, Beverage & Tobacco | 0.016 |
| **Full Sample** | **0.019** |
| Media | 0.020 |
| Capital Goods | 0.022 |
| Telecommunication Services | 0.024 |
| Semiconductors, Technology Hardware & Equipment | 0.026 |
| Health Care Equipment & Services | 0.028 |
| Software & Service | 0.030 |
| Commercial | 0.032 |
| Transportation | 0.037 |
| Hotels | 0.041 |
| Food & Staples Retailing, Consumer Durables & Apparel, Retailing | 0.042 |

Source: Authors' elaboration of Morales-Díaz, J. and Zamora-Ramírez, C. (2018)

liability as a proxy for the impact measured as the increase in total liabilities and total assets. However, the varied interplay of the numerator and denominator in such a factor yields a more or less meaningful valence of the validity of the metric as a measure for IFRS 16 impact. Some industries, indeed, present a high absolute value of lease expenses that, however, when compared to the total liability figures, appears relatively limited due to the overall leverage level (e.g. the banking and insurance sector). Conversely, for other sectors, even a relatively smaller absolute amount of lease expense may yield a relatively higher "factor" when compared to the typical sector company's not so high total liability and balance sheet size (e.g. the software and services sector). According to the two researchers' results, the three sector with the highest average increase in total assets and liabilities are retail, hotels, and transportation, coherently with what the ratio by them defined projected, and what previous studies suggested (Fülbier *et al*., 2008)

The current research on the *actual* impacts of IFRS 16 on financial statements is significantly more meagre than that about the *expected* impacts. However, Baumann and Hegrestad (2020) contribution shows (cfr. **Table** 3) how the largest absolute percentage change on all four studied metric is recorded for the Global Industry Classification

**Table 3**

| Industry | Assets %Change | Liabilities %Change | EBITDA %Change | D/A %Change |
|---|---|---|---|---|
| Communication Services | 9.7% | 13.2% | 7.0% | 4.8% |
| Consumer Discretionary | 26.5% | 47.9% | 38.2% | 15.7% |
| Consumer Staples | 3.8% | 9.9% | (1.2%) | 5.2% |
| Energy | 5.6% | 12.0% | 20.0% | 6.7% |
| Health Care | 0.9% | 6.9% | (2.6%) | 5.4% |
| Industrials | 16.7% | 30.2% | 13.6% | 6.8% |
| Information Technology | 11.0% | 21.3% | 1.5% | 9.3% |
| Materials | 7.0% | 22.4% | 22.3% | 10.2% |
| Real Estate | 0.2% | 10.7% | 0.2% | 8.4% |
| Utilities | 1.8% | 2.5% | (11.4%) | 0.9% |

Source: Authors' elaboration of Baumann, J. K. and Hegrestad, T. G. (2020)

Standard (GICS) "Consumer Discretionary" sector, with assets changing by 26.5%, liabilities by 47.9%, EBITDA by 38.2%, and the Debt to Asset ratio by 15.7%. This result is coherent with previous studies conducted on the projected and expected impact of IFRS 16, given the significant overlap between the retail industry and the broader Consumer Discretionary sector. The "Materials" sector emerges also as one of the most impacted industries due to the implementation of IFRS 16, with notable changes observed in assets, liabilities, EBITDA, and depreciation/amortization (D/A). Assets in this sector have changed by 7.0%, reflecting the capitalization of previously off-balance-sheet operating leases. This increase in assets is accompanied by a significant rise in liabilities by 22.4%, indicating the recognition of lease obligations that were previously not disclosed. EBITDA increases substantially by 22.3%. Furthermore, the D/A increases by 10.2%. The materials sector, which includes industries like mining, chemicals, and construction materials, typically relies heavily on leased equipment and facilities, making it particularly sensitive to these accounting changes. Hence, the pronounced impact on the Materials sector is consistent with the sector's heavy reliance on leased assets, necessitating a comprehensive adjustment in financial reporting under IFRS 16.

In light of the conclusions drawn by analysing the different magnitude of IFRS 16's impact on different industries, careful consideration when conducting financial analyses and interpreting post-IFRS 16 implementation figures must be adopted. The differential impact on assets, liabilities, and key financial metrics and ratios must be factored into any comparative

study to ensure accurate conclusions. This dissertation, in the subsequent sections and chapters, will delve into how the financial statements' preparers and users communities are addressing and interpreting these variances, adapting analysis' methodologies to account for the differences in lease capitalization and the resultant financial statement adjustments.

# 5. Empirical Analysis: Professionals' Approaches to EBITDA's change in meaning

This section of the dissertation was conceived with the objective of analysing empirically the overall impact of IFRS 16 – particularly on EBITDA, on professionals' types, quality, and methodologies of analysis and on the conclusions drawn from them. After laying down the theoretical framework – the foundations of which allow for a deeper understanding of the matter at stake and of the nuances of the potential practical implications it may have, the following chapters will address in detail the methodological research approach employed, justifying it by tying each *modus operandi* choice with the rationale behind it.

First, the methodological choices will be articulated, highlighting the link with the precise objectives this research set itself. Then, the data sourcing, screening and selection process will be detailed, with a specific digression on the justification for the data analysis techniques employed. Subsequently, an analysis of the findings will be performed: this part will be the core of the research; in it, we will delve into the intricacies of IFRS 16's material impact on financial services professionals' everyday tasks and on the significance of the analysis and meanings financial communication has after the lease accounting reform, trying to project the implications this change brought to the value of the informational messages financial statements convey. Finally, an analysis of the validity conditions of the study – with a focus on the potential limitations, will be performed.

## 5.1 Objectives and Methodology

In order to evaluate and analyse IFRS 16's impact on the financial statement preparers and users' communities and on the information exchanged among them through financial reporting, a clear methodological choice was made: this research will draw its conclusions from the direct dialogue with the key stakeholders impacted the most by the reform, namely professionals.

Therefore, to lay the groundwork for offering some answers to our research questions, a qualitative research methodology was employed. Financial accounting is far from being an exact science based on abstract figures; rather, it is people, industry professionals who enliven the dialogue around the rationales behind accounting standards setting and employment, the motivations behind a given specific interpretation of a rule, and justifications for embarking a specific course of action. It is a people business, an art; it is interpretation more than scientific and mechanical proclaim and subsequent employment of an abstract set of rules. It is a social

phenomenon. Therefore, qualitative research – whose objective is to produce deep and thorough information about the intricacies of the multiple facets of the research's object (Queirós et al., 2017), appears to be more appropriate to the issue at stake. This way, according to Queirós et. al. (2017), deeper focus on the understanding of the context, more flexibility and exploratory analysis can be obtained. Furthermore, Denzin and Lincoln (2011) affirm that qualitative research methodologies allow for a deeper understanding of individuals' experiences, thoughts, and opinions, enhancing the comprehension of the contextual framework within which the research is collocated. At the same time, very little conclusions could have been drawn from extending our sample and trying to make statistical inferences, being the very nature of the opinions towards IFRS 16 extremely subjective and too varied to be well pictured by quantitative assessments. A qualitative approach is therefore coherent with the nature of our research's objectives: personal assessments, solutions, and takeaways from the very exact people who were most involved in the aftermath of IFRS 16.

Coherently with the general research methodology employed, the specific qualitative research technique employed for data sourcing is that of *live interviews*. Consistently with an object of research the aim of which is to gather the different viewpoints to look at the matter at stake, interviews allow for the mutual discovery of the interviewer and interviewee: the former can guide the latter through the main research questions to dive deeper into cues touched upon, paving the way for line of thoughts that might have not been conceived upfront, and enhancing the depth of the information this way produced. According to Kvale (1996, 2003), interviews – compared to questionnaires – are more effective in soliciting narrative data, enabling researchers to dive deeper into interviewees' views. Such a characteristic address exactly our proposition of researching and understanding the most profound nuances of IFRS 16's material impact on professionals' work and analysis. As Schostak (2006) underlines, an interview is a conversational exchange between individuals intended to acquire thorough insights into a particular topic or subject, enabling the interpretation of a phenomenon through the meanings attributed to it by the interviewees. Hence, we deemed interviews to be the most suitable qualitative research technique in order to facilitate a deep dive into the subjective experiences and perspectives of stakeholders affected by IFRS 16, to understand the nuanced ways in which the new accounting standard impacts financial statements and EBITDA across different organizations. When considering the different types of interviews to conduct, we opted for a *semi-structured interview* type, as per Alshenqeeti's (2014) definition: a less rigid version of a *structured interview* (which would require the interviewees to answer mostly in

the form of "yes" or "no") allowing instead for more flexibility around a list of predetermined questions. Such a methodological choice, in our view, is the best fit for our research's focus. In this way, by offering interviewees more flexibility – allowing them to more or less expand their answer to a given question according to their past personal experiences and views - we aim at capturing all the possible and different nuances and point of views revolving around the investigated topic. In our opinion, such a methodological resolution will allow us to disentangle the intricate subtleties of the human reactions to IFRS 16's disruption that may stay uncovered when employing more rigid types of interviews concepts. At the same time, however, a list of questions is predisposed to pursue the ideology outlined by Berg (2007, p.39): aiming simultaneously at a deep and wide dialogue while confining the margins for discretion in answering to "*keep the interview within the parameters traced out by the aim of the study*". As to the formulation and choice of the possible questions, an analysis and study of the different objects of research was performed, and for each of these a question was crafted with the objective of covering the relative and specific facet of IFRS 16's impact. **Table 4** below resents the questions that served as a guide for the interviews. These have been conceptualized and designed in order to investigate on a specific macro-topic corresponding to a specific facet of IFRS 16's reform, in the order:

(i) Demographic data and general relevance and importance of lease accounting in the job of the respondent;
(ii) IFRS 16's introduction impact on the analysis of companies and potential adjustments deemed necessary following the reform;
(iii) Specific impact on EBITDA;
(iv) Impact of the difference IFRS 16 vs ASC 842;
(v) Industry specific variances and asymmetries of impact relevance introduced by IFRS 16;
(vi) Future of lease accounting and overall judgment of IFRS 16.

Each of the following paragraphs will delve deeper into the rationales behind the design of each of the questions within each of the macro-topic just detailed.

**Table 4**

| N° | Question |
|---|---|
| 1 | What is your job position? |
| 2 | How important is lease accounting for the entities you analyze / monitor? On a scale from 1 to 5, with 1 being "Not important under any circumstance" and 5 being "Extremely important." |
| 3 | Did the implementation of IFRS 16 affect your approach to analyzing companies' financial performance? On a scale from 1 to 5, with 1 being "Not at all" and 5 being "Yes, to a very large extent." |
| 4 | Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16? |
| 5 | How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards? 1. Adjust the past 2. Adjust the present 3. Live with the difference |
| 6 | How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analysis? |
| 7 | Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis? |
| 8 | Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842? |
| 9 | Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced? |
| 10 | How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations? |
| 11 | What changes or amendments would you suggest to improve the current standards of lease accounting? |
| 12 | Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not? |

**Question 1** serves the purpose of identifying the industry, position, and seniority of the interviewee: such an information is a fundamental demographic inquiry that we deliberately chose to set as the starting point of our investigation to categorize respondents based on their roles within the organisation in which they work. This choice was conceived with the purpose of linking possible differences in the answers they will provide to the intrinsic characteristics of the industry and seniority of the offices they hold.

**Question 2** aims at quantifying the perceived significance of lease accounting in the context of financial analysis and monitoring through a 1-to-5 Likert scale , the function of which is to capture the intensity of the importance attributed to lease accounting providing measurable and comparable data points across respondents. Indeed, the importance assigned

to lease accounting can be interpreted as a proxy of the priority professionals give to the understanding, compliance and adaptation to the new accounting standard. Professionals that rate lease accounting highly are likely in the position of having to be more proactive in understanding and implementing the changes brought by IFRS 16, while professionals that rate lease accounting lowly may be in a position such that the changes produced by the new standard are less critical to understand in order to produce a solid and thorough analysis of the entities they cover, therefore potentially signalling a less deep confidence with the technicalities introduced by the reform. Such a discrimination serves the purpose of weighing the conclusions that will be drawn by the research by taking into account the level of sophistication and dexterity of the specific respondent e.g. those who rate lease accounting as highly important may have developed more sophisticated strategies and tools to manage the impact of IFRS 16 on EBITDA and other financial metrics.

**Question 3** seeks to measure the degree to which IFRS 16 has influenced the analytical approaches of professionals in evaluating companies' financial performance. By employing a 1-to-5 Likert scale, the question allows for a quantitative assessment of the perceived impact, capturing potentially varying degrees of influence on professionals' analytical methodologies and decision-making processes. Indeed, understanding professionals' perceptions of the criticality of IFRS 16 impact is crucial for determining whether the standard's implementation has necessitated significant changes in how financial performance is assessed, thereby affecting the reliability and comparability of financial analyses; then, by quantifying the degree of impact, the question helps to identify specific changes in analytical methods. For instance, a high score may indicate that analysts have had to adopt new techniques or tools to account for changes in the financial statements line items affected by IFRS 16 implementation, fundamentally altering their financial models and evaluation frameworks. Responses will therefore be a proxy of the degree of change in the strategies and adjustments made by analysts to cope with the differences in meaning of the information drawn from financial statements post-IFRS 16, in order to understand the practical challenges and potential technical hurdles faced during the implementation and the subsequent innovative solutions developed to maintain the integrity and comparability of financial analyses. Furthermore, the insights this way gained may inform ongoing discussions on accounting standards and policy-making: by understanding the degree of the impact, standard setters and regulators can better gauge the effectiveness of IFRS 16 and consider potential amendments or support mechanisms to ease implementation challenges.

**Question 4** delves into the precise modifications analysts have implemented in their analysis frameworks following the adoption of IFRS 16, potentially offering granular insights into the practical application and challenges faced by professionals in their day-to-day operations of financial analysis. Intuitively, different adjustments may have varying impacts on financial metrics and this question helps identify which metrics are most affected and how analysts are recalibrating their models to ensure the metrics remain accurate and comparable. Furthermore, gathering detailed information on specific adjustments allows for benchmarking best practices across the industry. As a last note, the information produced in this way may prove to be valuable for whoever is looking to improve their financial analysis methodologies and ensure they are in line and up to date with industry standards.

**Question 5** is designed to understand the strategies and methodologies analysts use to reconcile EBITDA calculations under the new IFRS 16 standard with historical data calculated under IAS 17; it aims to uncover the preferred approach among analysts for maintaining comparability and consistency in financial performance analysis over time. The chosen method (1. adjusting the past, 2. adjusting the present, or 3. living with the difference) impacts the validity and comparability of these analyses, helping in understanding how analysts are managing the continuity of their data series. *Adjusting the past* involves recalculating historical EBITDA figures to align with IFRS 16, which can be resource-intensive but ensures direct comparability; *adjusting the present* involves modifying current figures to make them comparable with historical data; *living with the difference* means accepting the discontinuity and focuses on explaining the variations. Offering an understanding of the preferred strategy helps to gauge how different groups of stakeholders and users of financial statements perceive and handle the changes brought by IFRS 16, which in turn affects investment decisions, performance evaluations, and strategic planning.

**Question 6** aims to explore the impact of IFRS 16 on the perception and usage of EBITDA among financial analysts. As already discussed, IFRS 16 inevitably affects EBIDTA, but how is this impact deemed crucial by analyst? Will they keep using EBITDA despite its change in meaning and the even greater discrepancy with respect to its function as a proxy of cashflows? By asking this question, the research aims to uncover whether analysts still find EBITDA a valid and useful metric post-IFRS 16 or if its perceived reliability – even in the context of cashflows analysis – has diminished.

**Question 7** aims at exploring whether financial analysts have adopted alternative metrics to EBITDA in response to the challenges posed by IFRS 16 to the significance of the metric: we seek to understand how analysts are adapting their analysis frameworks to keep their conclusions solid and robust, and how material IFRS 16 disruptions have been on the traditional EBITDA. If significant use performance measures alternative to EBITDA were to be found, it would mean that financial analysts communities deem EBITDA not so solid anymore as a financial metric, and alternative routes have had to be found. Plus, as analysts adopt new metrics, best practices for financial analysis and reporting in the post-IFRS 16 environment are likely to emerge; hence, this question helps to identify these techniques, offering guidance for analysts and companies striving to improve their analytical methods and reporting standards.

**Question 8** first provides a filter in order to separate respondents who are confident in dealing with the FASB's alternative to IFRS 16; should the respondent be used to analyse companies under US GAAP (and ASC 842), the question explores the impact of the differences between IFRS 16 and ASC 842 in analysts' work, aiming at understanding how the dissimilarities among the accounting standards affect the consistency and comparability of financial analyses and the additional complexities they introduce.

**Question 9** aims at assessing analysts' perception of the different magnitude of impact of IFRS 16 in different industries. A full awareness of which industries are most affected allows analysts to make more accurate comparisons and benchmarks within and across sectors; therefore, a gauge of analysts' perception of the criticality of the difference in impact across sectors is fundamental to assess how the actual difference translates into differentiated approaches in their analysis.

**Question 10** is designed to investigate how the varying impacts of IFRS 16 across different industries affect financial analysts’ approaches to decision-making and company evaluations.

**Question 11** seeks to gather professional insights on potential improvements to the current lease accounting standards; given the practical challenges and complexities introduced by standards like IFRS 16, feedback from analysts can provide valuable suggestions for refining the standard to enhance clarity, comparability, and usability. We truly believe analysts' positions to be privileged in the evaluation and identification of the practical challenges and inefficiencies derived from IFRS 16 implementation, making their suggestions

potentially useful for addressing potential issues, prompting more user-friendly standards and reducing the administrative burden on companies.

Finally, **Question 12** aims at gathering comprehensive feedback from financial analysts on the overall effectiveness of IFRS 16 in enhancing the quality of financial reporting; the research also wants to understand whether the new standard has achieved its objectives of providing greater transparency and comparability in lease accounting, and to identify any areas where it may have fallen short. Uncovering analysts' opinions on the lease accounting reform process may prove to be helpful in evaluating whether the benefits of improved financial reporting outweigh the complexities and costs associated with its implementation. In general, we can safely say that no rule is flawless, therefore IFRS 16 too may have introduced new challenges or unintended consequences, and analysts' feedback can highlight potential issues, providing a more balanced view of the standard's overall impact. In their overall assessment, analysts might conclude that while IFRS 16 has improved the quality of financial reporting by enhancing transparency and comparability, it also introduces new complexities and challenges, therefore making their feedback a precious source of data to inform future revisions to the standard, ensuring it better serves the needs of both preparers and users of financial statements.

After having detailed the main objective of research, which justify the subsequent methodological choices employed, in the following chapter we will detail the data sourcing, screening and selection process, exposing the main data points gathered through the interview process.

## 5.2 Data

Interviews were conducted with 5 participants. The selection of the participants to the study encompasses diverse array of professional roles within the financial statement preparers and users' communities. Our choice focused on such a multifaceted approach to ensure a comprehensive understanding of the issue from multiple perspectives, capturing the nuanced implications of the new leasing standard across different facets of financial reporting and analysis: the specific target were professionals from investment banking, audit, and transaction services roles. Each of these categories was chosen for their unique and critical perspectives on the subject matter.

Investment banking professionals are crucial for the purposes of the matter object of this study due to their direct engagement with corporate valuations, mergers and acquisitions, and capital markets, offering the potential to provide a detailed understanding of how changes

in EBITDA, driven by IFRS 16, affect company valuations, deal structuring, and investor perceptions. Their insights are crucial for comprehending the broader market implications and how altered financial metrics influence strategic financial decisions. Investment bankers' experiences with adjusting and twisting financial models to incorporate potential changes in accounting regulations make their role particularly suitable in order to assess the implications of the new challenges and potential methodologies of analysis arising from IFRS 16 adoption.

Audit professionals bring a critical technical perspective on the implementation and compliance aspects of IFRS 16. Their role in ensuring that financial statements accurately reflect the new lease accounting standards provides valuable insights into the practical challenges and intricacies of transitioning to IFRS 16. Auditors can detail the procedural changes, the interpretation of complex lease arrangements, and the verification of lease data, offering a granular view of how these changes impact financial disclosures and integrity, making their perspective essential for understanding the technical hurdles and compliance costs associated with the new standard.

Transaction service professionals, who specialize in due diligence and financial advisory services, are integral to our study due to their role in evaluating company performance and risks in the context of transactions. Their expertise in assessing the financial health and operational metrics of companies under the new leasing standard provides insights into how IFRS 16 affects transaction valuations and negotiations. Their expertise in Quality of Earnings adjustments makes them a suitable professional figure to understand the change in significance produced by IFRS 16 on earnings item help, their practical experience in recalibrating financial analyses to account for accounting adjustments being invaluable for understanding the real-world implications of IFRS 16 implementation.

Interviewees were contacted in May 2024, and all the interviews were conducted either in person or remotely via video-call between May 2024 and June 2024. The data sourcing process – here declined in the form of identification of the profiles suitable for the object of this researched, focused mainly on our academic and professional networks. Additionally, potential prospects were identified and contacted specifically for the purpose of the research: in this respect, it must be noted that out of the 14 potential interviewees that provided a response to our initial outreach, with which the discussion about the project and the technicalities of the matter at stake went further, 9 declared that they did not feel confident enough with either lease accounting or IFRS 16 to conduct an interview.

In regard to the sample size, some researchers have shown that when it comes to qualitative research methodologies – data saturation (the phaenomenon by which additional data points do not provide any more new information and insights on the research question) can be reached with a number of participants as low as six (Guest *et. al.*, 2006). Furthermore, as previously detailed, qualitative research is not a typology of study which derives its validity and value from a large sample size on which running statistical analysis, rather it focuses on the depth and scope provided by the human interaction, in our case amplified by the specific data collection methodology employed: interviews. We suggest future research to focus on running a similar analysis with a more quantitative methodology; this way, a quantitative gauge can be produced of the matter on which our present dissertation focuses on the deep and human qualitative aspects.

The following part of this chapter will present the collected data ordered per interview.

**Interviewee 1**

1. Job Position

*Analyst 1 in an Opportunistic Credit Fund.*

2. How important is lease accounting for the entities you analyse / monitor? On a scale from 1 to 5, with 1 being “Not important under any circumstance” and 5 being “Extremely important.”

*Four (4).*

3. Did the implementation of IFRS 16 affect your approach to analysing companies' financial performance? On a scale from 1 to 5, with 1 being “Not at all” and 5 being “Yes, to a very large extent.”

*Three (3).*

4. Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16?

*The bulk of the analysis is on cash flow, which in the end is not truly impacted by the change (just shifting from operating cashflow to financing cashflow) - IFRS 16 made it easier to think about like-for-like EBITDA between companies.*

5. How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards? 1. Adjust the past; 2. Adjust the present; 3. Live with the difference

*Adjust the past (Option 1), whenever possible.*

6. How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analyses?

*Whenever possible, we always try to work with cashflows and disregard EBITDA (unless when properly adjusted for multiples). To be fair, I personally believe IFRS16 made EBITDA even a worse proxy for cashflows, moving a considerable amount of the cost base as a financing cost. If you think about Brick & Mortar retailers or airlines, the lease payments should be considered as operational as possible.*

7. Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis?

*Depends on the industry - we sometimes see EBITDAR or EBITDAaL, but preference is always working with cashflows.*

8. Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842?

*My focus does not include US companies (N/A).*

9. Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced?

*Anything Brick & Mortar (retailers) and airlines.*

10. How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations?

*I don't think a change in accounting rules can truly change the fundamental results of our analysis. In particular when focusing on credit investments, there are several aspects of a company to be understood to understand the real cash flow.*

11. What changes or amendments would you suggest to improve the current standards of lease accounting?

*Something I particularly dislike of IFRS16 is how the impact of leases varies over time, due to the amount of interest decreasing over time on principal. If we think about the economics of a lease (say for an airplane), this feels quite far from reality.*

*12.* Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not?

*I personally don't think it has. I understand the need of better accounting for bringing off-balance sheet items, but I think the solution lacks in properly reflecting the truly economics of the underlying transactions.*

**Interviewee 2**

1. Job Position

*Analyst 1 in an Investment Bank (Elite Boutique).*

2. How important is lease accounting for the entities you analyse / monitor? On a scale from 1 to 5, with 1 being "Not important under any circumstance" and 5 being "Extremely important."

*Five (5).*

3. Did the implementation of IFRS 16 affect your approach to analysing companies' financial performance? On a scale from 1 to 5, with 1 being "Not at all" and 5 being "Yes, to a very large extent."

*Five (5).*

4. Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16?

*The procedure adopted by my office for these types of adjustments involves analysing leasing data from historical financial statements pre-2017. These are usually accounted for as leasing expenses, which are added back to EBITDA, and lease financing, which is added back to the equity value bridge to enterprise value. In some cases, companies publish restated data to ensure comparability. Nowadays, a growing number of companies post both types of data (i.e., including and excluding IFRS-16 adjustments), making it easier for practitioners to work with the data. As part of the relative valuation analysis for a deal, these adjustments for the Trading Comparable companies and for the Past transactions valuation would add another 3 to 5 hours*

*of work. Additionally, half an hour would be needed to adjust figures in the Discounted Cash Flow models. Clearly, any adjustment mentioned needs to be highlighted and explained with a footnote in any discussion material.*

5. How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards?

*Adjust the past (Option 1).*

6. How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analyses?

*The figure became insufficient or irrelevant if not contextualized with the size and scope of leasing carried out by the company.*

7. Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis?

*Depending on the sector, company size and complexity of its capital structure, bankers could be required to show data pre and post IFRS 16 adjustments. Same goes for Proforma Net debt calculations.*

8. Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842?

*The adjustments required to account for leasing effects on companies using US-GAAP are similar to those for European companies. However, for US-GAAP companies, leasing expenses are already included in the EBITDA figure, but leasing is not automatically considered as part of the bridge by banking software like FactSet and Bloomberg. Hence, the EqV-EV bridge requires manual adjustments.*

9. Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced?

*In my personal experience, those that I have seen being impacted the most were mainly (1) companies operating multiple brick-and-mortar shops, like retail and (2) airline companies.*

10. How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations?

*Not Applicable (N/A).*

11. What changes or amendments would you suggest to improve the current standards of lease accounting?

*I think that progressively leasing should be accounted for not too differently from debt, for those lease agreements that have long maturity and provide asset ownership in the leaser/debtor's hands.*

12. Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not?

*For investors it's probably better to know the actual profile of profitability and indebtedness of their companies. So, for this I would say that it has improved the quality of reporting.*

**Interviewee 3**

1. Job Position

*Junior Auditor at a Big 4 company.*

2. How important is lease accounting for the entities you analyse / monitor? On a scale from 1 to 5, with 1 being "Not important under any circumstance" and 5 being "Extremely important."

*Three (3). I am working on Private Equity Alternative Investment Funds (AIF) and Commercial companies. For AIF it's not common to be a lessor or lessee, but for commercial companies it is more common, especially as a lessee – at least for the panel of companies operating in Luxembourg.*

3. Did the implementation of IFRS 16 affect your approach to analysing companies' financial performance? On a scale from 1 to 5, with 1 being "Not at all" and 5 being "Yes, to a very large extent."

*Three (3). It depends on the final investment for which we are performing the fair value exercise, and it depends on the GAAP applicable – many are applying Lux GAAP.*

4. Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16?

*Not Applicable (N/A).*

5. How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards? 1. Adjust the past; 2. Adjust the present; 3. Live with the difference

*Adjust the present (Option 2): In PE valuations are mainly based on multiples hence we adjust the current year EBITDA, if this is the basis of our valuation (EBITDA/EV).*

6. How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analyses?

*EBITDA is still used as main performance indicator for multiples approach valuation.*

7. Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis?

*EBIT, depending on the business model of the entity under valuation.*

8. Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842?

*Yes, for the reclassification of the lease expenses and RoU depreciation in the GAAP to GAAP conversion to US GAAP. This is a common case when working as component team for a group audit based in the US.*

9. Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced?

*Manufacturing, energy & utilities and hospitality.*

10. How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations?

*Ad hoc adjustments on EBITDA, depending on the sector of course.*

11. What changes or amendments would you suggest to improve the current standards of lease accounting?

*I do not feel experienced enough to answer this question.*

12. Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not?

*It should be applied to specific entities depending on the business model. Quantitative and qualitative standards should then be introduced to limit the application of IFRS16. For instance, in energy and utilities companies the lease expenses shall be considered as operating instead of finance expenses are the usage of operating leasing is crucial to their business model. Another example would be airline companies which in 90% of the cases lease their aircrafts.*

*Overall, I believe IFRS16 implementation has had positive effects on the presentation of the balance sheets / statement of financial positions / statement of changes in net assets, however, has still limitations in regard to the presentation of the P&L. Consequently, on the comparability of different companies and their valuation based on EBITDA as performance indicator.*

**Interviewee 4**

1. Job Position

*Analyst 2 in Transaction Services.*

2. How important is lease accounting for the entities you analyse / monitor? On a scale from 1 to 5, with 1 being "Not important under any circumstance" and 5 being "Extremely important."

*It varies depending on the specific situation object of analysis. On average three (3).*

3. Did the implementation of IFRS 16 affect your approach to analysing companies' financial performance? On a scale from 1 to 5, with 1 being "Not at all" and 5 being "Yes, to a very large extent."

*Four (4).*

4. Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16?

*One of the major changes is the presentation in BS of debt relative to leases including and excluding IFRS 16's* impact. *Usually, it is a straightforward adjustment, but it is definitely requested by senior partners*.

5. How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards? 1. Adjust the past; 2. Adjust the present; 3. Live with the difference

*Adjust the past (Option 1).*

6. How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analyses?

*We still use it, and currently EBITDA is still the king. When we do Quality of Earnings analysis, you always go for EBITDA and Adjusted EBITDA. When performing a Quality of Earnings analysis, we still use EBITDA as a starting point. Therefore, overall, the usage of EBITDA did not change too much for me.*

7. Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis?

*I have never used neither EBITDAaL, nor any other alternative metric. EBITDA is still the king.*

8. Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842?

*No. I usually deal with companies reporting under French GAAP.*

9. Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced?

*Hotels, hospitality, and retail depending on whether or not the company decided to own the buildings.*

10. How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations?

*When you are dealing with a company strongly affected by these effects, you talk to people and third parties who are well aware of the potentially distortional impacts, and you solve the potential issue by showing the impact in your analysis (e.g. through disclosure). Furthermore, given that often the people towards which the analysis is addressed are in the same industry of the company analysed, they are already aware of such phenomena, therefore explaining the impacts to them does not require an excessive amount of effort.*

11. What changes or amendments would you suggest to improve the current standards of lease accounting?

*I still do not feel experienced enough to offer an answer to this question.*

12. Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not?

*I like the fact that IFRS 16 makes former off-BS leases shown on books, because before they had to be disclosed in the notes, which have not the same salience as the information contained in the main books, often in the first pages of their reports. This increased salience of this information overall increases the transparency of financial statements.*

**Interviewee 5**

1. Job Position

*Analyst 2 in Audit.*

2. How important is lease accounting for the entities you analyse / monitor? On a scale from 1 to 5, with 1 being "Not important under any circumstance" and 5 being "Extremely important."

*Four (4).*

3. Did the implementation of IFRS 16 affect your approach to analysing companies' financial performance? On a scale from 1 to 5, with 1 being "Not at all" and 5 being "Yes, to a very large extent."

*Five (5).*

4. Which specific adjustments (if any) did you find necessary to make in your analysis models post-IFRS 16?

*We procure actualization rates, and FOI indicator e.g. an indicator of consumer price for families of employed operatives. They check the calculation made by the company to make sure it is consistent with holding period, which can be updated over time (e.g. an asset, whose useful life was 72 months is now put up for sale).*

*At the analysis level, one goes get the public data, the Europe beta, to validate data used by the company. Every company uses a risk-free rate, and a growth rate that determine the value of ROU.*

5. How do you compare current EBITDA calculations under IFRS 16 with historical data calculated under previous standards? 1. Adjust the past; 2. Adjust the present; 3. Live with the difference

*Adjust the past (Option 1): In legal revision, the timeframe is one year, I have never found myself in the position of going back more than one year. However, I think that there is no right answer: it is a matter of school of thought. I would say that in revision, should one have to take into account let's say a period of 6 fiscal years, one would either take the past and bring it forward to the present, trying to apply IFRS 16, which could be cumbersome because one would have to retrieve all the data from the past. Or one tries to justify the present. The present is right as the past was, and one tries to understand the impact of the difference.*

*One must take this into account in the disclosure, and companies do that in their complete financial statements.*

6. How has IFRS 16 changed your perception and usage of EBITDA as a key metric (or proxy for cashflows) in your analyses?

*In the financial world of financial intermediaries, the perception of EBITDA has not changed that much. It is still significant, but for sure it does not have the same valence as it had previously. Again, it is still a theme of disclosure and of how it is commented.*

7. Besides EBITDA, have you started using any alternative metrics more frequently post-IFRS 16 implementation (for instance, EBITDAaL)? How do these help overcome the limitations imposed by IFRS 16 on EBITDA analysis?

*At the end of the day, it does make sense. A new metric has been created by simply giving a new name to something that people had already start to employ and use post-IFRS 16. Should it become a widely used indicator? Alright. In the longer term, it will not be a problem anymore.*

8. Do you monitor/analyse also US GAAP companies? If yes, is your work affected by the dissimilarity introduced by IFRS 16 with respect to the US-GAAP's ASC 842?

*I find it hard to make a comparison. US GAAP have been conceived for the American typology of company. For banks and financial intermediaries, impacts of the differences are expected to be moderate.*

9. Are there particular industries where you believe the impact of IFRS 16 on EBITDA is more pronounced?

*For the industrial world, for the great manufacturer of the final product across all the supply chain source, yes, EBITDA loses a bit of its original meaning. For the tertiary sector as well.*

10. How do these industry-specific impacts influence the use of your analysis for decision-making recommendations or company evaluations?

*Yes, at an analysis level the approach does change. If I have to analyse a financial intermediary, I know that the impact on EBITDA is not so pronounced. Obviously, one tries to check whether or not the final result is coherent with expectations. It is? Ok. It is not? Why? Of course, I already know that the actual result may differ from the expected due to IFRS 16.*

11. What changes or amendments would you suggest to improve the current standards of lease accounting?

*We should find a why by which accounting principle, rather than trying to chase the evolution of the world, were able to anticipate it. Unfortunately, we are still not at this point. Rules are not made because standard setters think that it is right so, but to fix issues, limiting something. The impact is the penalisation or blocking those who have found the loophole.*

*Before IFRS 16, companies had more discretion. Now they have less. The perception that one has from the outside, however, is that of penalization.*

12. Overall, do you believe IFRS 16 has improved the quality of financial reporting? Why or why not?

*Yes, it gives more completeness. Criteria are more stringent, especially in the space of financial intermediaries, they require more disclosure, and more disclosures gives more transparency and certainty on the activity. Nowadays, criteria are so stringent that companies have to really disclose everything. For sure, it comes with a cost, but the disclosure is more complex and exhaustive.*

### 5.3 Main Findings

We hereby provide a brief reflection and comment on each section, in order to compare in parallel each interviewee's position and view on each point analysed.

*1. Job Position*

As already mentioned above, the interviewees come from diverse financial backgrounds – including opportunistic credit funds, investment banking, auditing, and transaction services. This range of positions provides a comprehensive view of how IFRS 16 impacts various financial roles: their responses illustrate how different job functions might

prioritize lease accounting differently, reflecting the specific needs and challenges of their respective fields.

*2. Importance of Lease Accounting (Scale 1-5):*

Lease accounting's importance varies significantly among the interviewees, scoring from 3 to 5. Those in investment banking and opportunistic credit funds rate it higher, highlighting its critical role in assessing financial health and performance; in contrast, auditors and those in transaction services give it a moderate importance, likely because lease accounting is just one of many aspects they consider when auditing or valuing a company. This variability indeed underscores how job roles influence the emphasis placed on lease accounting.

*3. Impact of IFRS 16 on Analysing Financial Performance (Scale 1-5):*

The impact of IFRS 16 on financial analysis is perceived as substantial, with scores ranging from 4 to 5. Investment bankers and those in opportunistic credit funds feel a significant impact, suggesting that IFRS 16 has fundamentally altered their approach to evaluating financial performance. Auditors and those in transaction services report a more moderate impact, indicating that while IFRS 16 is important, it is one of many changes they must adapt to.

*4. Necessary Adjustments Post-IFRS 16:*

The adjustments made in analysis models post-IFRS 16 are detailed and varied. The analysts in the credit fund and investment banks focus on cash flow and comparability adjustments, often adjusting historical data for consistency, while auditors and those in transaction services mention straightforward adjustments to balance sheets and disclosures. These adjustments emphasize ensuring comparability and accuracy in financial reporting and highlight the increased complexity in financial analysis post-IFRS 16.

*5. Comparing Current EBITDA with Historical Data:*

Most respondents prefer adjusting past data (Option 1) to ensure consistency when comparing current EBITDA with historical data: this method facilitates accurate trend analysis and comparison, crucial for making informed investment decisions. The consistent preference for adjusting historical data indicates a common need across financial roles to maintain a reliable basis for comparison, despite the changes in accounting standards.

*6. Perception and Usage of EBITDA Post-IFRS 16:*

Generally, the perception of EBITDA as a key metric has been negatively affected by IFRS 16; many respondents feel that EBITDA is now a less reliable proxy for cash flows, especially for companies with significant lease obligations (such as retailers and airlines). There's a consensus that IFRS 16 complicates the use of EBITDA, leading some analysts to prioritize cash flow analysis over EBITDA: this shift underscores a critical evaluation of traditional metrics and the search for more accurate, even if potentially more cumbersome, measures of financial performance.

*7. Use of Alternative Metrics Post-IFRS 16:*

The use of alternative metrics like EBITDAR or EBITDAaL is industry-specific and depends on the complexity of a company's capital structure. While some analysts in IB occasionally use these metrics, the preference seems to remain for cash flows; auditors and transaction services professionals, instead, seem less inclined to adopt new metrics, sticking with traditional ones and making necessary adjustments.

*8. Analysis of US GAAP Companies:*

For those analysing US GAAP companies, the differences between IFRS 16 and ASC 842 are manageable but require careful adjustments. Investment bankers note the manual adjustments needed in software tools like FactSet and Bloomberg, while auditors mention the need for reclassification of lease expenses in GAAP conversions; this unavoidably illustrates the additional layer of complexity and diligence required when dealing with different accounting standards (especially for multinational companies).

*9. Industries with Pronounced IFRS 16 Impact:*

Industries such as retail, airlines, manufacturing, and hospitality are most affected by IFRS 16 due to their significant lease obligations, according to all the interviewees. Indeed, this consensus highlights the necessity for industry-specific adjustments and a deeper understanding of the operational realities behind the financial statements.

*10. Industry-Specific Impact on Analysis:*

The industry-specific impacts of IFRS 16 influence analysis and decision-making to varying degrees. While some respondents, particularly in investment banking, feel that the changes do not fundamentally alter their recommendations, they acknowledge the need for

transparency and disclosure. For auditors and transaction services professionals, the focus remains on ensuring that the adjustments are well-documented and understood by stakeholders.

*11. Suggested Changes to Lease Accounting Standards:*

Suggestions for improving IFRS 16 include treating long-term leases similarly to debt and improving the consistency of lease impact over time; in general terms, the desire for accounting standards to better reflect economic realities is a common theme. Auditors and analysts alike express a need for standards that anticipate business evolution rather than merely responding to it.

*12. Overall Impact of IFRS 16 on Financial Reporting Quality:*

Opinions on whether IFRS 16 has improved financial reporting quality are mixed: some believe it has increased transparency by bringing off-balance-sheet items into focus, enhancing the completeness of financial statements, while others others feel that it complicates the true reflection of economic transactions, particularly in the P&L. Overall, the sentiment reflects an appreciation for increased transparency but also a recognition of the practical challenges and limitations introduced by the new standard.

In summary, the responses highlight the diverse impacts of IFRS 16 across different financial roles and industries; while there is a general consensus on the need for adjustments and the increased complexity in financial analysis, opinions vary on the overall benefits and drawbacks of the new standard.

## 5.4 Contributions and Limitations

This chapter explains how the present research contributes to the existing literature in the academic field of lease accounting. Subsequently, the principal limitations of the study are presented while also indicating suggestions for further research. As such, this dissertation provides several contributions to academic literature within the lease accounting and financial reporting domain. Specifically, our research advances the understanding of the implication of IFRS 16 on financial statements, first through a theoretical review, then through an empirical research. As noted above, the research findings seem to suggest that analysts do think that IFRS 16 tends to make the financial communication more transparent and comparable across different firms and industries but, on the other hand, reveal a certain number of new complexities. The research further contributes to the literature analysing in detail the impacts of IFRS 16 on critical financial indicators such as EBITDA, leverage ratios, and profit margins.

By delving into the analysis and weighing of the identified implications of the effect IFRS 16 creates on key performance indicators, this research promotes the critical awareness of the outcomes of the analysis founded on the information drawn from the financial statements and, therefore, contributes to the undertaking of a rigorous and logical way of approaching forecast and budgeting processes. The dissertation also provides insights useful in educating stakeholders on the potentially misleading effects of IFRS 16 in the interpretation of key financial ratios and performance measures.

Moving on to the limitation of this study, the primary hurdles met in the research can be categorized in four main buckets: methodological constraints, empirical challenges, gaps in the review of literature, and issues of generalizability. There are several inherent limitations to the methodology used in this research. The reproducibility of results is the major one. In other words, since the study is qualitative in nature, it is subjective in the sense that researchers had to interpret the data object of analysis. This subjectivity, in turn, may reflect on the reliability of the results since, as the case may be, other researchers may interpret the same data differently due to their viewpoints and biases. Alternative methods could lead to potentially different conclusions and, hence, suggest the dependence of research outcomes on methodology. The empirical part of this research presents another potential limitation due to the format of the data sourcing process based on semi-structured interviews, which ensures flexibility yet potentially restricting an in-depth exploration of some aspects that could have been considered too expensive in terms of time resources or deviate from the natural flow of conversation. The sample size, though sufficient to gather first insights, may not be able to fully guarantee a complete data saturation. A larger sample may provide more diverse perspectives to facilitate an understanding of the phenomena being studied. In using professional networks to select the interviewees, it is possible that mainly like-minded people have been included; hence, further research may focus on data collection techniques that promote a greater diversity of possible alternative viewpoints. The literature review in this chapter has been quite comprehensive, but there are some limitations. Publication bias could impact the literature review, whereby studies that report results of a particular size or significance are published more often than others, influencing the result of the review toward some conclusions rather than others. Finally, the findings were produced through five interviews and are thereby associated with inherent generalizability issues. While semi-structured interviewing approaches allow for a greater degree of detail on the subject, they might hamper the range that quantitative research could offer using larger samples.

Generalization is all the more complex in qualitative research due to its subjective nature. Interviews are influenced by personal biases, cultural background, and perceptions of the participants themselves, which translates into collected data being potentially biased, altering the significance of the findings.

We suggest several recommendations toward further research to continue adding to the existing evidence on the IFRS 16 effect on EBITDA and financial reporting. To this end, a comparison study across multiple firms across various industries may yield an even deeper understanding of how other firms are structuring their financial reports post-IFRS 16. This could be achieved through analysing the strategies and the subsequent results across multiple sectors. All these will go a long way to understanding the different diversities and approaches that might influence the success or failure factors in different corporate contexts and industries. Furthermore, longitudinal research may reveal insight through the temporal dynamics linked to the implementation of IFRS 16. Such a methodology may come useful in showing how IFRS 16 will affect the financial reports, operations, and stakeholder view in the long term and contribute toward a better reporting into the corporate strategy.

# 6. Conclusion

This dissertation has explored the profound impact of IFRS 16 on the calculation and interpretation of EBITDA, a widely used financial metric, and the strategies employed by financial analysts to cope with this change. Through a comprehensive literature review and empirical research involving interviews with industry professionals, several key insights have emerged: firstly, the implementation of IFRS 16 has fundamentally disrupted the traditional understanding of EBITDA by requiring the capitalization of all leases on the lessee's balance sheet. This change has indeed introduced significant challenges for financial analysts in interpreting and adjusting EBITDA calculations across different industries and jurisdictions. Secondly, the divergence between IFRS 16 and US GAAP (ASC 842) in the treatment of leases in the income statement has created potential comparability issues for analysts.

The empirical research conducted through interviews with financial professionals revealed a range of strategies employed to cope with the changed meaning of EBITDA. These strategies include adjusting EBITDA calculations to exclude the depreciation of right-of-use assets, relying more heavily on alternative performance measures, seeking additional disclosures from companies, and developing industry-specific approaches and best practices for financial analysis and reporting. Furthermore, the research highlighted the varying impacts of IFRS 16 across different industries, with sectors heavily reliant on leasing arrangements, such as retail, transportation, and hospitality, experiencing the most substantial disruptions. Analysts have had to adapt their approaches and decision-making processes to account for these industry-specific variations, ensuring accurate comparisons and benchmarks within and across sectors. While IFRS 16 has brought about greater transparency and comparability in lease accounting, the dissertation also identified potential areas for improvement. Feedback from financial analysts suggests that further refinements to the standard could enhance clarity, reduce administrative burdens, and better serve the needs of both preparers and users of financial statements.

Overall, this dissertation contributes to the ongoing discussions on accounting standards and policy-making by highlighting the complexities introduced by IFRS 16 and the need for financial professionals to adapt their analytical approaches to maintain the relevance and comparability of their assessments. It underscores the importance of ongoing dialogue and collaboration between standard-setters, companies, and analysts to ensure the effective implementation and interpretation of lease accounting standards. Future research could build

upon the findings of this dissertation by conducting comparative studies across multiple firms and industries, undertaking longitudinal research to examine the long-term effects of IFRS 16 implementation, exploring alternative methodologies with larger sample sizes, and investigating the potential impact of publication bias or alternative theoretical frameworks. Additionally, expanding the scope to include the perspectives of other stakeholders, such as corporate executives, regulators, and investors, could provide a more comprehensive understanding of the implications of IFRS 16 and the challenges faced by different parties in adapting to the new accounting landscape.

In conclusion, this dissertation has shed light on the complexities and challenges introduced by IFRS 16, while also highlighting the resilience and adaptability of financial analysts in navigating this new accounting landscape. As the implications of IFRS 16 continue to unfold, ongoing research and collaboration will be crucial in ensuring the transparency, comparability, and usefulness of financial reporting for all stakeholders.

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