
# SOME OBSERVATIONS ON THE FIRST-TIME ADOPTION OF IFRS 16 IN THE CONTEXT OF LESSEE AIRLINES

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## ABSTRACT

### SOME OBSERVATIONS ON THE FIRST-TIME ADOPTION OF IFRS 16 IN THE CONTEXT OF LESSEE AIRLINES

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This thesis focuses on the first-time adoption of International Financial Reporting Standard 16 Leases. By establishing a global sample from the airline industry which is one of the most lease oriented industries, it analyses three issues in the context of lessee perspective: (1) presentation of leased (right-of-use) assets and lease liabilities on the statement of financial position, (2) change in financial position of the airlines by analyzing liquidity, solvency, and profitability ratios considering prior year and restated prior year financial statement values of airlines that adopted IFRS 16 on a full-retrospective basis, and (3) compliance level of mandatory disclosures of lessee.

The research reveals that more than 50% of airlines report their leased assets and lease liabilities as a separate line item on the face of the statement of financial position.

In terms of change in ratios, typical ratios indicate that net working capital and current ratio declined in terms of liquidity, debt to equity and debt to assets ratios increased in terms of solvency and total asset turnover also declined in terms of asset efficiency. However, some ratios should be analyzed on a case-by-case for each airline.

Regarding disclosure requirements, airlines report their additions, depreciation expenses, carrying amounts, interest expenses, maturity analysis, and total cash outflows for leases. However, they declare that they benefit from exemption

of reporting short-term leases and leases of low-value assets, but they don't usually report their expenses for such leases. In addition, diversity of reporting has been observed.

Further research is to analyze presentational and disclosure issues for the second year of IFRS 16's adoption to observe any improvements in reporting.

**Keywords:** IFRS, Leases, IFRS 16, First-time Adoption, Airline Industry.

# ÖZET

## UFRS 16 STANDARDININ KİRACI HAVA YOLU ŞİRKETLERİ TARAFINDAN İLK UYGULAMASI ÜZERİNE BAZI GÖZLEMLER

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Bu tez, Uluslararası Finansal Raporlama Standardı 16 Kiralama İşlemlerinin ilk uygulamasına odaklanmıştır. Kiralama işlemlerinin en fazla görüldüğü sektörlerden biri olan havayolu sektöründen küresel bir örneklem oluşturarak kiracı perspektifinde üç konu analiz edilmiştir: (1) finansal durum tablosunda kiralanan (kullanım hakkı elde tutulan) varlıkların ve kiralama borçlarının sunumu, (2) UFRS 16'yı tamamen geriye dönük olarak uygulayan havayollarının önceki yıl ve yeniden düzenlenmiş önceki yıl finansal tablo değerleri dikkate alınarak likidite, ödeme gücü ve karlılık oranlarının analiz edilmesi yoluyla havayollarının finansal durumundaki değişiklik ve (3) kiracının zorunlu açıklamalarının uygunluk düzeyi ele alınmıştır.

Araştırma, havayollarının %50'den fazlasının finansal durum tablosunda kiralanan varlıklarını ve kiralama yükümlülüklerini ayrı bir kalem olarak rapor ettiğini ortaya koymaktadır.

Oranlardaki değişim açısından, tipik oranlardan net işletme sermayesi ve cari oranın likidite açısından düştüğünü, borç/özkaynak ve borç/aktif toplamı oranlarının ödeme gücü açısından yükseldiğini ve toplam aktif devir hızının da varlık verimliliği açısından düştüğünü göstermektedir. Bununla birlikte bazı oranlarında her havayolu için ayrı ayrı analiz edilmesi gerekmektedir.

Finansal tablo açıklamaları ile ilgili olarak, havayolları edinimlerini, amortisman giderlerini, defter değerlerini, faiz giderlerini, vade analizini ve kiralamalar için toplam nakit çıkışlarını raporlamaktadır. Ancak, kısa vadeli

kiralamalar ve düşük değerli varlık kiralamaları için raporlama muafiyetinden yararlandıklarını beyan etmekle birlikte, bu tür kiralamalara ilişkin giderlerini genellikle açıklamamaktadırlar. Ayrıca raporlamada çeşitlilikte gözlemlenmiştir.

Daha sonra yapılacak bir çalışmada, raporlamadaki iyileştirmeyi gözlemlemek için UFRS 16'nın benimsenmesinin ikinci yılına ilişkin sunum ve açıklama konuları analiz edilebilir.

**Anahtar Kelimeler**: UFRS, Kiralamalar, UFRS 16, İlk Uygulama, Havayolu Şirketleri.

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| | |
|---|---|
| CA | Current Assets |
| CC | Continuous Capital |
| CFO | Cash Flows from Operations |
| CL | Current Liabilities |
| EBIT | Earnings Before Interest and Taxes |
| EBITDA | Earnings Before Interest, Taxes, Depreciation, and Amortization |
| IASB | International Accounting Standards Board |
| IATA | International Air Transport Association |
| IE | Interest Expense |
| IFRS | International Financial Reporting Standards |
| L | Liabilities |
| NCA | Non-Current Assets |
| NCL | Non-Current Liabilities |
| NI | Net Income |
| NS | Net Sales |
| NWC | Net Working Capital |
| ROA | Return on Assets |
| ROE | Return on Equity |
| TA | Total Assets |
| TL | Total Equity |
| TL | Total Liabilities |

# INTRODUCTION

A lease is the transfer of the right to use an asset for a certain period of time to the lessee in return of rent or other benefit (Altıntaş and Sarı 2012: 86). There are two categories of leases: finance lease and operating lease.

In this context, finance lease, is an installment purchase, and is one of the most important alternatives in financing the investments. In the finance lease, (1) all risks and benefits are transferred, (2) the property is transferred to the lessee at the end of the lease period, (3) the lessee has the possibility to purchase the asset at a lower price than its fair value, (4) the lease term covers most of the asset's economic life, (5) the present value of the minimum lease payments, and (6) the leased asset is only owned by the lessee (Gönen and Akça 2014: 76; Özerhan & Yanık 2012). However, all risks and benefits are not transferred in the operating lease.

Under the IFRS, finance lease and operating lease transactions had been regulated under IAS 17 Leases until the new lease standard IFRS 16 Leases has been issued in 2016 and entered into force in 2019. According to IAS 17, finance lease transactions have been considered on-balance sheet transactions versus operating lease transactions have been considered off-balance sheet. Therefore, entities that have had finance lease, they reported their finance lease assets and liabilities on the statement of financial position but those that had operating lease did not report their operating lease assets and liabilities on the statement of financial position (Pamukçu 2010: 491). Operating lease liabilities that were not recorded on the statement of financial position understated the amount of total liabilities. In this context, IFRS 16 requires the inclusion of all lease liabilities along with their right-of-use (leased) assets except for short-term leases and leases of low-value assets into the statement of financial position for the accurate reporting of total liabilities (IASB 2018).

Within this framework, this thesis contributes to the accounting literature in terms of the first-time adoption of IFRS 16 considering presentation, change in financial position, and disclosure in the lessee context.

# CHAPTER I

# AIRLINE INDUSTRY & FINANCIAL REPORTING

## 1.1 AIRLINE INDUSTRY

The airline industry includes a wide variety of businesses, called airlines that offer airfreight services for paying customers or partners. These airfreight services are provided for both passengers and cargo. They offer scheduled and/or non-scheduled services. The airline industry consists of the wider travel industry by providing customers with the ability to purchase seats on flights and travel to different parts of the world. Airlines are usually divided into different categories: (1) International airlines, (2) National airlines, and (3) Regional Airlines (Revfine 2021).

1. International Airlines: They are a group of the largest, highest profile and most effective airlines such as Delta Airlines, American Airlines, and Turkish Airlines. They usually provide global services to ship passengers and cargo over long distances.

2. National Airlines: They consist of next step compared to the largest international airlines. They usually serve regions within their home countries, but most also offer flight services to international destinations with smaller fleet size such Anadolu Jet of Turkey as of 2022.

3. Regional Airlines: They are the smallest of the three categories. They usually provide services in particular territories, particularly in the context of the parts of the world with lower demand levels and where services are not offered by countrywide or worldwide airlines.

Air transport consists of the significant worldwide transport network necessary for global trade and tourism by providing economic benefits that cannot be underestimated in business and daily life (Çelik 2017: 83). In addition, it facilitates economic growth, particularly in developing countries. Therefore, airline connections are organized in a way that will increase and develop countries' social and economic benefits.

Actually, air transport has a vital role in technology, capital, ideas, and economic development. In such context, the economic benefits of air transport can be listed as follows (Çelik 2017: 83-87). (1) Air transport provides employment and prosperity, (2) Air transport produces wider catalytic (spin-off) benefits such as improving supply chain management, innovation, and cooperation, (3) Air transport contributes to world trade, (4) Air transport stimulates tourism, and (5) Air transport is an important taxpayer.

## 1.2 FINANCIAL REPORTING

In the context of financial reporting, airlines other than those operating in the United States are inclined to prepare their financial statements and notes under IFRS. As part of the regulation of their country of incorporation, they usually adopt IFRS either being a listed airline in an organized stock exchange on a mandatory basis as it is in the case of Turkish Airlines, British Airways, and Aeromexico or being a non-listed airline on a voluntary basis as it is in the case of TAP Portugal and Virgin Atlantic Airlines of the Europe (Öztürk 2022a). In addition, non-listed Croatian Airlines of the Europe, and Srilankan Airlines of the Sri Lanka have adopted IFRS due to meeting the criteria of being large sized entity in Croatia and Sri Lanka.

In addition to country-specific regulations, the top regulatory authority of the airline industry IATA also is in favor of adopting IFRS in the global airline industry to provide comparative financial information on an industry-wide context (Çalıyurt 2004: 42). That's why, it should be noted that it has prepared its accounting disclosure guidelines under IFRS considering IAS 16 Property, Plant, and Equipment, IFRS 8 Operating Segments, and IFRS 9 Hedge Accounting (IATA 2009, 2016a, 2016b, 2016c) as well as accounting guides under IFRS considering IFRS 9 Financial Instruments, IFRS 15 Revenue from Contracts with Customers, and IFRS 16 Leases (IATA 2022a, 2022b, 2022c).

Because airline industry is one of the most lease-oriented one in the sense that leasing rather than purchasing is mostly preferred for the acquisition of their aircrafts, transportation equipment, simulator equipment, engine, parts, and vehicles other than aircrafts (IASB 2016) the financial position of IFRS adopting airlines has been negatively changed due to the adoption of IFRS 16 since 2018/19 because IFRS 16

requires the preparers of the financial statements to include all leased assets except for short-term leases and leases of low-value assets regardless of whether they are finance leased or operating leased assets in the statements of financial position (balance sheet) along with their liabilities in order to accurately reflect the airline's debt and equity structure.

### 1.2.1 Objectives of the Thesis

There are mainly three objectives of this thesis: (1) It examines the presentation of leased assets and leased liabilities in the statement of financial position at the first-time adoption of IFRS 16 in the airline industry to observe whether comparative balance sheets are presented within the industry; (2) it analyses the financial ratios of airlines adopting IFRS 16 on a full-retrospective basis to observe how assets and liabilities change after the adoption as well as how financial ratios change in terms of liquidity, solvency, and profitability, and (3) it analyses lessee's disclosures in the context of airline industry on the first-time adoption of IFRS 16 to observe the compliance level in such context.

### 1.2.2 Significance of the Thesis

This thesis is important because it provides insights about the first-time adoption IFRS 16 in the global airline industry in terms of presentation, financial analysis, and disclosure.

### 1.2.3 Limitations of the Thesis

The sample includes airlines in the global context. Even though the results of the discussion on the presentation and disclosure is based on 53 airlines, discussion on financial analysis is limited to 12 airlines because only 12 airlines adopted IFRS 16 on a full-retrospective basis and provided comparative prior year financial information.

Another limitation of this research is related to negative CFO, negative EBIT, negative EBITDA, and loss rather than profit (net income) on the numerator as well as negative equity on the denominator of some financial ratios. For instance, some airlines have both loss on the numerator and negative equity on the denominator, leading to a

positive ROE which is misleading. In such critical points, ratios were eliminated for some airlines.

### 1.2.4 Assumptions of the Thesis

This research uses IFRS financial statements and notes that are subject to independent audit. Thus, it is assumed that financial statements and notes provide reliable financial information.

# CHAPTER II

# LITERATURE REVIEW

This chapter is divided into three subsections regarding the literature review on the First-Time Adoption of IFRS 16: (1) Literature Review on the Presentation of Right-of-Use Assets and Lease Liabilities in the Statement of Financial Position, (2) Literature Review on the Effect of the Adoption of IFRS 16 over the Financial Ratios, and (3) Lessee's Adoption of IFRS 16 Disclosures.

## 2.1 PRESENTATION OF RIGHT-OF-USE ASSETS AND LEASE LIABILITIES IN THE STATEMENT OF FINANCIAL POSITION

Under IFRS 16, a lessee has two presentation options to present its right-of-use assets and lease liabilities [IFRS 16.47]. Presentation can be either on the face of the statement of financial position as a separate line item, or by disclosing in the notes meaning that right-of-use assets are included within the same line item as that within which the corresponding underlying assets would be presented if they were owned as well as lease liabilities are included within other liability accounts.

Due to the lease-oriented structure of the airline industry, Öztürk (2016) proposes that airlines should report their right-of-use assets and lease liabilities on the face of the statement of financial position to clearly share this information with the users of financial information due to the relative magnitude or size of these assets and liabilities in this industry.

In addition, Öztürk (2022b) declares that Air-France – KLM reports such assets and liabilities as a separate line item on the face of the statement of financial position under IFRS 16.

In this context, chapter 4 of this thesis contributes to the financial reporting literature by extending the prior research of Öztürk (2022b) in the following issues for the purpose of analyzing whether airlines report comparative financial information in

the context of IFRS 16: (1) determination of the trend of reporting of right-of-use assets in the statement of financial position on the first-time adoption of IFRS 16 in the global airline industry; and (2) determination of the trend of reporting of lease liabilities in the statement of financial position on the first-time adoption of IFRS 16 in the global airline industry.

## 2.2 THE EFFECT OF THE ADOPTION OF IFRS 16 OVER THE FINANCIAL RATIOS

Under the former IAS 17, only the finance leases were included in the statement of financial position along with their liabilities versus operating leases were off-balance sheet and disclosed in the notes of finance statements (Pamukçu 2010: 491).

The lack of not reporting operating leases in the statement of financial position and its effect on the financial position has been debated by several authors in the lease literature related to financial reporting such as Imhoff, Lipe and Wright (1991, 1997) and Beattie et al. (1998).

Imhoff, Lipe and Wright (1991) developed the constructive capitalization basis that requires the estimation of the amount of liabilities and assets that would be reported on the statement of financial position if the operating leases had been treated as finance leases since their inception. After such estimations, they included such liabilities and assets into the statement of financial position to accurately observe the financial position of the companies. They pointed out that unrecorded assets and liabilities make major changes on the financial position of the companies in terms of ROA and liabilities / equity ratios regarding the effects on the statement of financial position.

On the other hand, Imhoff, Lipe and Wright (1997) used the constructive capitalization basis to analyze the effects of such capitalization over the income statement in the context of (1) operating income before interest expense and (2) net income. Considering ROA and ROE, they pointed out significant variations before and after the constructive capitalization. They emphasized that unrecorded assets, and liabilities in a lease-oriented industry should be considered both at the level of income

statement and statement of financial position so that the analysis of financial statements can be accurate.

By establishing sample of 300 companies from United Kingdom, Beattie et al. (1998) determines that capitalization of operating leases has an important impact on the assets and liabilities of companies when unrecorded assets and liabilities are included in total assets and liabilities. Therefore, this paper indicates that the following ratios were significantly influenced after the capitalization: profit margin, ROA, asset turnover, and three measures of gearing: (1) long-term debt / capital employed, (2) total debt / equity, and (3) (total borrowing – cash and cash equivalents) / equity. In addition, it emphasizes that there are variations from one industry to another in terms of the change in the level of the ratios after the capitalization.

Due to these off-balance sheet reporting of operating leases, IASB has been aware that IAS 17 provides unrecorded lease information as well as missing financial information in the statement of financial position for the purpose of accurate financial analysis. Therefore, IASB issued IFRS 16 Leases in 2016 as a standard that requires reporting of operating and finance leases along with their liabilities in the statement of financial position as seen in Table 1.

**Table 1: Difference from IAS 17 to IFRS 16 on the Balance Sheet**

| | IAS 17 | | IFRS 16 |
|---|---|---|---|
| | **Finance Lease** | **Operating Lease** | **All Leases** |
| **Assets** | 🏛🏛🏛 | --- | 🏛🏛🏛🏛🏛🏛 |
| **Liabilities** | ₺₺₺ | --- | ₺₺₺₺₺₺ |
| **Off-Balance Sheet Financing** | | 🏛🏛<br>🏛<br>₺₺₺ | |

**Source: IASB (2016;)**

The change in the balance sheet also makes some changes on the traditional income statement as seen on Table 2. In this context, single expense which refers to operating lease expenses has been cancelled after the adoption of IFRS 16 and replaced by additional depreciation expenses and interest expenses in addition to the depreciation and interest expenses of existing finance leases (Marşap & Yanık 2018).

**Table 2: Differences from IAS 17 to UFRS 16 on the Income Statement**

| | IAS 17 | | IFRS 16 |
|---|---|---|---|
| | **Finance Leases** | **Operating Leases** | **All Leases** |
| Revenue | x | x | x |
| Operating costs (excluding depreciation and amortization) | --- | *Single expense* | --- |
| **EBITDA** | | | |
| Depreciation and amortization | *Depreciation* | | *Depreciation* |
| **Operating Profit** | | | |
| Finance Costs | *Interest* | | *Interest* |
| **Profit Before Tax** | | | |

**Source: IASB (2016; )**

After the issuance of IFRS 16, several authors prepared papers on the potential changes that were occurred on the financial statements of companies. Since the particular of focus of this thesis is the airline industry, the following research were made by several authors such as Öztürk (2016), Öztürk & Serçemeli (2016), Aktaş, Kargın & Arıcı (2017), Joubert, Garvie, & Parle (2017), Maali (2018), Morales-Díaz & Zamora-Ramírez (2018), Veverková (2019), Gouveia (2019), Yu (2019), Alabood et al. (2019), and Tofanelo et al. (2021) for the potential effects of IFRS 16 over the financial ratios of airlines. Other than Öztürk (2016), other papers are usually based on Imhoff, Lipe and Wright (1991, 1997).

In the context of Öztürk (2016), the research focuses on three airlines (Turkish Airlines, Pegasus Airlines, and Lufthansa) but it does not make adjusting financial calculations. Instead, it declares what would be the expected change of liquidity and solvency ratios when IFRS 16 is adopted as seen on Table 3.

However, the research of Öztürk & Serçemeli (2016), Aktaş, Kargın & Arıcı (2017), Joubert, Garvie, & Parle (2017), Maali (2018), Morales-Díaz & Zamora-Ramírez (2018), Veverková (2019), Gouveia (2019), Yu (2019), and Alabood et al. (2019), and Tofanelo et al. (2021) focuses on hypothetical analysis on the first-time adoption of IFRS 16 in the airline industry.

The paper of Öztürk & Serçemeli (2016) considers the case of Pegasus Airlines and it reflects the potential effect of the adoption of IFRS 16 over the solvency and profitability ratios as seen on Table 3. In addition to Öztürk & Serçemeli (2016), Aktaş, Kargın & Arıcı (2017) also analyses the case of Pegasus Airlines as seen on Table 3. Both research findings complement each other in terms of common ratios.

Joubert, Garvie, & Parle (2017) analyses the potential changes over the financial ratios of Qantas Airlines, and Virgin Australia. This research shows that solvency ratio is in compliance with the prior research as seen on Table 3; however, the change in ROA after the adoption of IFRS 16 depends on the change in airline's net income and total assets.

Maali (2018) examines the expected effects of IFRS 16 over the financial ratios of Air Arabia, Oman Air, Turkish Airlines, Qatar Airways, Emirates, Royal Jordanian. As seen on Table 3, solvency ratios are in line with the prior research as well as the change in ROA and ROE after the adoption of IFRS 16 depends on the change in airline's net income, equity, and total assets.

The paper of Morales-Díaz & Zamora-Ramírez (2018) takes the transportation industry into consideration for the analysis of the potential effects of adoption of IFRS 16. The sample includes the following airlines: Air France-KLM, IAG, Aegean Airlines, Ryanair, and Lufthansa. Solvency ratios follow the prior research as seen on Table 3, but this paper declares that profitability ratios decrease in the context of the sample of transportation industry. In particular, ROA is in line with some of the prior research.

Considering 15 European airlines, Veverková (2019) analyses the potential effect of the IFRS 16 adoption. Liquidity and solvency ratios are in line with the prior research as seen on Table 3. However, this paper replaces the traditional ROA and ROE ratios by changing the numerator from net income to EBIT. It founds out similar results compared to prior research.

Gouveia (2019) analyses the case of TAP Portugal. As a reflection of IFRS 16, solvency ratios go up similar to prior research as seen on Table 3. In the context of profitability ratios, Asset Turnover Ratio declines as well as EBITDA / IE ratio declines in line with prior research. The change in ROA and ROE ratios reveals different upward or downward results compared to prior research.

Yu (2019) analyses the case of Air China. Solvency and profitability ratios are in line with prior research as seen on Table 3.

Alabood et al. (2019) analyses the case of Qatar Airways, The Royal Jordanian Airlines, and Saudi Airlines. Solvency ratios are in line with the prior research but the change in ROA and ROE is consistent with some of the prior research as seen on Table 3.

Tofanelo et al. (2021) focuses on the effects of adoption of IFRS 16 over the financial statements of three Brazilian airlines (Azul, Gol, and Latam). Results of this paper are consistent with the prior research as seen on Table 3.

**Table 3: Comparative Prior Research on the Potential Effects of IFRS 16 Adoption over the Financial Ratios**

| | Öztürk (2016) | Öztürk & Serçemeli (2016) | Aktaş et al. (2017) | Joubert et al. (2017) | Maali (2018) | Morales-Díaz & Zamora-Ramírez | Veverková (2019) | Gouveia (2019) | Yu (2019) | Alabood et al. (2019) | Tofanelo et al. (2021) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Liquidity** | | | | | | | | | | | |
| NWC | Decrease | - | - | - | - | - | - | - | - | - | - |
| Current Ratio | Decrease | - | - | - | - | - | Decrease | - | - | - | Decrease |
| **Solvency** | | | | | | | | | | | |
| TL / TE | Increase | Increase | Increase | Increase | Increase | Increase | Increase | Increase | - | Increase | Increase |
| CL / TE | Increase | - | - | - | - | - | - | - | - | - | - |
| NCL / TE | Increase | - | - | - | - | - | - | - | - | - | - |
| TL / TA | Increase | Increase | Increase | - | Increase | Increase | Increase | Increase | Increase | Increase | - |
| NCA / TE | Increase | - | - | - | - | - | - | - | - | - | - |
| NCA / CC | Increase | - | - | - | - | - | - | - | - | - | - |
| **Profitability** | | | | | | | | | | | |
| Asset Turnover | - | - | - | - | - | - | - | Decrease | Decrease | - | Decrease |
| NI / NS | - | - | Decrease | - | - | - | - | - | - | - | - |
| EBIT / NS | - | - | Increase | - | - | - | - | - | - | - | - |
| EBIT / L + E | - | - | - | - | - | - | - | - | - | - | Decrease |
| EBITDA / IE | - | - | - | - | - | Decrease | - | Decrease | - | - | - |
| (NI + IE) / IE | - | - | Decrease | - | - | - | - | - | - | - | - |
| EBIT / TA | - | - | - | - | - | - | Decrease | - | - | - | - |
| EBIT / TE | - | - | - | - | - | - | Increase | - | - | - | - |
| ROA | - | Decrease | Decrease | Depends | Depends | Decrease | - | Increase | - | Decrease | - |
| ROE | - | Increase | Decrease | - | Depends | - | - | Decrease | - | Depends | - |

On the other hand, the research of Öztürk (2022b) focuses on real data of Air-France – KLM on the first-time adoption of IFRS 16 because Air-France – KLM is an early adopter of IFRS 16 in 2018 on a full-retrospective basis and reveals how financial ratios change from prior year to restated prior year to reflect the effect of the adoption of IFRS 16 as seen on Table 4.

**Table 4: Realized Effects of IFRS 16 Adoption over the Assets, Liabilities, and Financial Ratios of Air France - KLM**

| | **Öztürk (2022b)** |
|---|---|
| **Change in Assets & Liabilities** | |
| Change in Total Assets | Increase |
| Change in Non-Current Assets | Increase |
| Change in Total Liabilities | Increase |
| Change in Current Liabilities | Increase |
| Change in Non-Current Liabilities | Increase |
| **Liquidity Ratios** | |
| Net Working Capital | Decrease |
| Current Ratio | Decrease |
| Cash Flows from Operations / Average Current Liabilities | Increase |
| **Solvency Ratios** | |
| Total Liabilities / Equity | Increase |
| Total Current Liabilities / Equity | Increase |
| Total Non-Current Liabilities / Equity | Increase |
| Total Liabilities / Total Assets | Increase |
| Cash Flows from Operations / Average Non-Current Liabilities | Decrease |
| Cash Flows from Operations / Average Total Liabilities | Increase |
| EBITDA / Interest Expense | Decrease |
| (Cash Flows from Operations + Interest Paid) / Interest Paid | Decrease |
| **Profitability Ratios** | |
| Asset Turnover Ratio | Decrease |
| EBITDA / Net Sales | Increase |
| EBIT / Net Sales | Increase |
| Net Income / Net Sales | Increase |
| ROA | Increase |
| ROE | Increase |

**Source: Öztürk (2022b)**

Considering the prior research, it is possible to make the following analysis on the change in financial ratios:

1. Net working capital is usually expected to go down after the adoption of IFRS 16 due to the increase in current liabilities.
2. Current Ratio is usually expected to go down after the adoption of IFRS 16 due to the increase in current liabilities.
3. Solvency Ratios where the liabilities divided by equity or assets is usually expected to go up after the adoption of IFRS 16 due to the increase in current, non-current, and total liabilities.
4. Profitability ratio where Net Sales divided by Total Assets is usually expected to go down after the adoption of IFRS 16 due to the increase in total assets.
5. For other ratios, the financial analyst should be prudent and decreasing or increasing effect of the IFRS 16 adoption over ratios should be analyzed on a case-by-case basis due to the cancellation of operating lease expenses, recording of additional depreciation expenses as well as interest expenses.

By taking the prior research into account, chapter 5 of this thesis will contribute to the financial analysis literature after the adoption of IFRS 16 in the following issues by extending the research of (Öztürk, 2022b): (1) change in assets and liabilities of airlines on a case-by-case basis and in the global context after the adoption of IFRS 16, (2) change in the liquidity ratios of airlines on a case-by-case basis and in the global context, (3) change in the solvency ratios of airlines on a case-by-case basis and in the global context, and (4) change in the profitability ratios of airlines on a case-by-case basis and in the global context.

## 2.3 COMPLIANCE LEVEL OF DISCLOSURES IN THE NOTES OF FINANCIAL STATEMENTS AND THE CASE OF LESSEE'S DISCLOSURES UNDER IFRS 16

Chapter 6 of the thesis focuses on the compliance level of the mandatory disclosures. Compliance means that companies fully provide the information required by the related financial reporting standards in the notes of the financial statements (Öztürk 2022b).

In the context of IFRS, the analysis of the compliance level of the mandatory disclosures has been debated by the several authors: by Glaum, et al., (2013) in the context of the disclosures of IFRS 3 and IAS 36; by Tsalavoutas, André, and Dionysiou (2014) in the context of the disclosures of IFRS 3, IAS 36, and IAS 38; by Kobbi-Fakhfakh, Shabou, and Pigé (2018) in the context of the disclosures of IFRS 8; by Boujelben and Kobbi-Fakhfakh (2020) and Coetsee, et al., (2022) in the context of the disclosures of IFRS 15. In this context, researchers usually emphasize that there is a lack of full compliance, disparity, and improvement of disclosures is needed.

Regarding IFRS 16, Tsalavoutas, I., Tsoligkas, F., & Evans, L. (2020) states that IFRS 16 is an emerging area of research in terms of compliance level of disclosure requirements. In this context, Ali (2021) focuses on the compliance level of the disclosure requirements of IFRS 16 for listed companies from Bahrein Stock Exchange and does not declare a full compliance in the context of transition, presentation, lessor, and lessee disclosures.

In addition to Ali (2021), Öztürk (2022b) focuses on the compliance level of the disclosure requirements of IFRS 16 from a lessee perspective at the first-time adoption of IFRS 16 regarding Air-France-KLM. This research indicates that Air-France-KLM is fully compliant in terms of meeting the lessee's disclosure requirements of IFRS 16. However, it does not provide a holistic picture of the airline industry on the compliance level of the disclosure requirements of IFRS 16 from a lessee perspective.

In this context, chapter 6 of the thesis contributes to the disclosure related financial reporting literature in terms of disclosures of IFRS 16 from a lessee perspective in the global airline industry by extending the prior research of Öztürk (2022b).

# CHAPTER III

# RESEARCH DATA AND METHODOLOGY

Chapter 3 organizes the data and methodology of this research under the following sub-headings: (1) Research methodology; (2) Research Design; (3) Research Sample; (4) Research Instrument; and (5) Procedure for Data Collection.

## 3.1 RESEARCH METHODOLOGY

The thesis uses a quantitative research method: (1) The data for the presentation of statement of financial position is hand-collected from the annual financial statements of the airlines and frequency distribution method has been used to analyze the trend of the presentation of right-of-use assets and lease liabilities on the face of the statement of financial position; (2) The data related to the comparative prior year and restated prior year values is hand-collected and uses financial ratios on spreadsheet applications to analyze how the first-time adoption of IFRS 16 influences prior year and restated prior year values and ratios; and (3) the data for lessee's disclosures is also hand-collected and uses the frequency distribution method to analyze the compliance level of required lessee's disclosures on the first-time adoption of IFRS 16.

## 3.2 RESEARCH DESIGN

Research design of this thesis is in the form of a quantitative interpretive study where the lease related research on presentation, ratios, and disclosures are realized, quantified, and interpreted.

## 3.3 RESEARCH SAMPLE

For the purpose of this research, two samples were established. The first sample consists of 53 IFRS adopting listed and non-listed airlines and refers to a

global representation of the airline industry as seen on Table 5. This sample is used to gather data related to the presentation of right-of-use assets and lease liabilities on the face of the statement of financial position and to collect data related to the lessee's disclosures on the first-time adoption of IFRS 16.

**Table 5: Listed and Non-Listed Airlines Adopting IFRS**

| **Americas** | El Al |
|---|---|
| GOL Linhas Aereas | Aeroflot |
| Azul Brazilian Airlines | Turkish Airlines |
| Air Transat | Pegasus Airlines |
| Air Canada | **Africa** |
| Cargojet Airways | Royal Jordanian |
| LATAM Airlines Group | Kenya Airways |
| Aeromexico | Jazeera Airways |
| Volaris | Qatar Airways |
| COPA Airlines | Emirates |
| **Europe** | Air Arabia |
| Croatia Airlines | Abu Dhabi Aviation |
| Finnair | **Asia-Pacific** |
| Air France – KLM | Regional Express |
| Lufthansa Group | Alliance Airlines |
| Aegean Group | Qantas |
| Aer Lingus | Korean Air |
| Ryanair | Air Asia X |
| Wizz Air | Air New Zealand |
| TAP Group | Cebu Pacific Air |
| SAS - SAS Group | Singapore Airlines |
| International Airlines Group | Sri Lankan Airlines |
| Virgin Atlantic Group | Air Asia Berhad |
| Air Partner | **China & North Asia** |
| Easy Jet | Cathay Pacific Airlines |
| British Airways | Air China Group |
| Fast Jet | China Southern Airlines |
| Icelandair | China Eastern Airlines |
| Norwegian Air | China Airlines |

The second sample includes 12 airlines whose adoption of IFRS 16 is based on full-retrospective basis meaning that they provide comparative financial statements on the first-time adoption of IFRS 16 as if IFRS 16 has been adopted in prior year as seen on Table 6. This refers to the 23% of the global sample. Because

adoption of IFRS 16 on a full-retrospective basis is an option (IFRS 16.C5), most airlines did not provide comparative financial statements on its first-time adoption.

**Table 6: Airlines Adopting IFRS 16 through Full-Retrospective Basis**

| **Americas** | **Europe** |
|---|---|
| Azul Brazilian Airlines | Finnair |
| Air Transat | Air France - KLM |
| Air Canada | Wizz Air |
| LATAM Airlines Group | Virgin Atlantic Group |
| Volaris | Aeroflot |
| COPA Airlines | **Asia-Pacific** |
| | Qantas |

In this context, those adopting IFRS 16 on a full-retrospective basis usually refers to the airlines whose aircraft fleet includes wholly or mostly operating leased aircrafts such as (1) Azul Brazilian Airlines operates 147 operating leased aircrafts versus 19 finance leased aircrafts; (2) Wizzair operates 121 operating leased aircrafts; (3) Aeroflot operates 326 operating leased aircrafts, 34 finance leased aircrafts, and 7 owned aircrafts; (4) Air France – KLM operates 243 operating leased aircrafts, 93 finance leased aircrafts, and 212 owned aircrafts; and (5) Copa Airlines operates 76 operating leased aircrafts, and 29 owned aircrafts.

### 3.4 RESEARCH INSTRUMENT

In order to gather the data three research instruments were used during the research process:

(1) For the purpose of collecting data on presentation of right-of-use assets and lease liabilities on the face of the statement of financial position, a checklist was prepared to find out the results of the following 2 hypotheses:

a. **H1:** Airlines are inclined to report their right-of-use assets as a separate line item on the face of the statement of financial position rather than within a certain non-current asset account such as property, plant and equipment.

b. **H2:** Airlines are inclined to report their lease liabilities as a separate line item on face of the statement of financial position rather than within a certain current/non-current liability account such as financial liabilities.

(2) For the purpose of collecting data on the comparative prior year and restated prior year values through ratios, a checklist was prepared to find out the results of the following 17 hypotheses:

a. **H1:** The decreasing trend of Net Working Capital ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

b. **H2:** The decreasing trend of Current Ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

c. **H3:** The increase in (CFO /Average Current Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

d. **H4:** The increase in (Total Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

e. **H5:** The increase in (Total Current Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

f. **H6:** The increase in (Total Non-Current Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

g. **H7:** The increase in (Total Liabilities/ Total Assets) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

h. **H8:** The decrease in (CFO /Average Non-Current Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

i. **H9:** The increase in (CFO /Average Total Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

j. **H10:** The decrease in (EBITDA / Interest Expense) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

k. **H11:** The decrease in (CFO + Interest Paid / Interest Paid) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

l. **H12:** The decrease in Asset Turnover Ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

m. **H13:** The increase in (EBITDA / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

n. **H14:** The increase in (EBIT / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

o. **H15:** The increase in (Net Income / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

p. **H16:** The increase in ROA ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

q. **H17:** The increase in ROE ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

(3) For the purpose of collecting data on the lessee's disclosures, a checklist was prepared to find out the results of the following 8 hypotheses in the context of the most frequently observed disclosures in every airline:

a. **H1:** Airlines are inclined airlines inclined to disclose their depreciation charges for right-of-use assets by class of underlying asset.

b. **H2:** Airlines are inclined to disclose their additions to right-of-use assets.

c. **H3:** Airlines are inclined to disclose the carrying amount of their right-of-use assets at the end of the reporting period by class of underlying asset.

d. **H4:** Airlines are inclined to disclose their interest expense on lease liabilities.

e. **H5:** Airlines are inclined to disclose their maturity analysis of their lease liabilities.

f. **H6:** Airlines are inclined to disclose their expenses relating to short-term leases.

g. **H7:** Airlines are inclined to disclose their expenses relating to leases of low-value assets.

h. **H8:** Airlines are inclined to disclose their total cash outflow for leases.

(4) For the purpose of analyzing comparative prior year and restated prior year values through ratios, the author prepared spreadsheets to calculate financial ratios and transformed those quantitative data into bar charts.

(5) For the purpose of analyzing lessee's disclosures, the author made a content analysis to observe whether the mandatory information has been provided on the notes of financial statements and how they are presented and transformed those data analysis into bar charts.

## 3.5 PROCEDURE FOR DATA COLLECTION

Data of the sample were collected from the airlines' annual reports considering the ending date of the first annual reporting period referring to the first-time adoption of IFRS 16 in the airline industry. In order to collect the data, audited financial statements and notes of the airlines for the year 2017, 2018 and 2019 were downloaded into the personal computer of the author.

First-time adoption of the IFRS 16 in the airline industry refers to the year 2018 for early adopting airlines and 2019/20 for timely adopting airlines. Early adopters are Air France – KLM and Easy Jet.

The reporting period of airlines that were adopted IFRS 16 on a full-retrospective basis for the prior year and current year are provided below for the

purpose of analyzing the effect of the IFRS 16 adoption over the financial ratios as seen on Table 7.

**Table 7: Reporting Periods for Airlines under Full-Retrospective Basis**

| No | Airline Company | Previous Year | Current Year |
|---|---|---|---|
| **1** | Azul Brazilian Airlines | 31.12.2018 | 31.12.2019 |
| **2** | Air Transat | 31.10.2019 | 31.10.2020 |
| **3** | Air Canada | 31.12.2018 | 31.12.2019 |
| **4** | LATAM Airlines Group | 31.12.2018 | 31.12.2019 |
| **5** | Volaris | 31.12.2018 | 31.12.2019 |
| **6** | COPA Airlines | 31.12.2018 | 31.12.2019 |
| **7** | Qantas | 30.06.2019 | 30.06.2020 |
| **8** | Finnair | 31.12.2018 | 31.12.2019 |
| **9** | Air France - KLM | 31.12.2017 | 31.12.2018 |
| **10** | Wizz Air | 31.03.2019 | 31.03.2020 |
| **11** | Virgin Atlantic Group | 31.12.2018 | 31.12.2019 |
| **12** | Aeroflot | 31.12.2018 | 31.12.2019 |

# CHAPTER IV

# FINDINGS ON PRESENTATION OF RIGHT-OF-USE ASSETS AND LEASE LIABILITIES ON THE STATEMENT OF FINANCIAL POSITION

This chapter provides research findings about how right-of-use assets and lease liabilities are presented on the face of the statement of financial position by airlines on the first-time adoption of IFRS 16.

## 4.1 PRESENTATION OF RIGHT-OF-USE ASSETS ON THE STATEMENT OF FINANCIAL POSITION

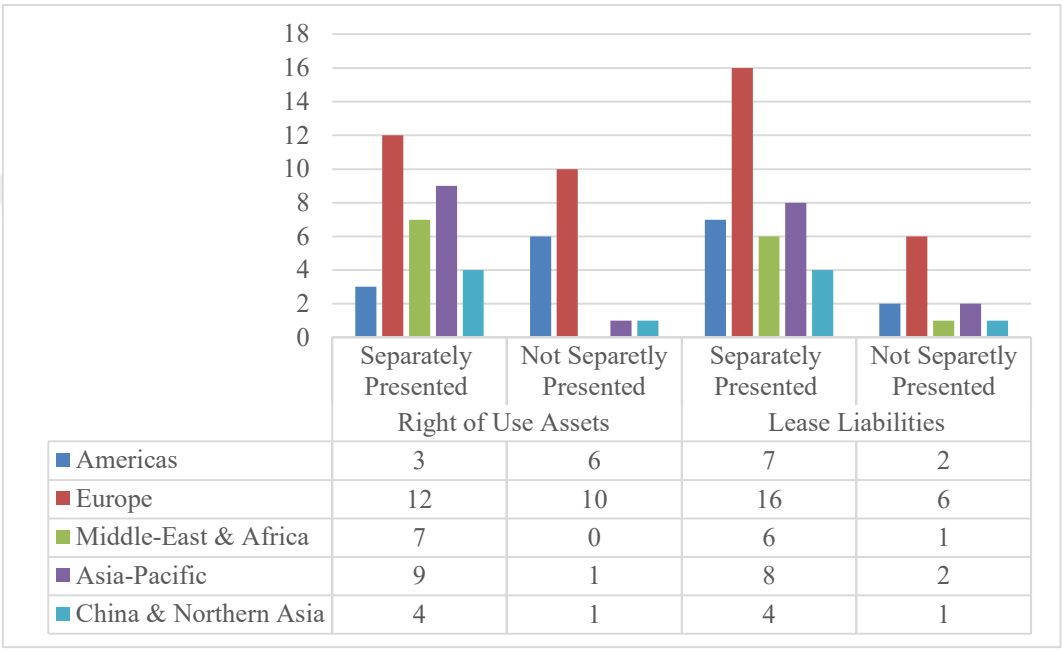
**H1:** Airlines are inclined to report their right-of-use assets as a separate line item on the face of the statement of financial position rather than within a certain non-current asset account such as property, plant and equipment or intangible assets.

This hypothesis was accepted by the research findings because 66% of airlines report their right-of-use assets as a separate line item on the statement of financial position as seen on Figure 1 versus the remaining 34% classify these items within “property, plant, and equipment” account, or within “property, aircraft, and equipment” account, or within “tangible fixed assets” account.

## 4.2 PRESENTATION OF LEASE LIABILITIES ON THE STATEMENT OF FINANCIAL POSITION

**H2:** Airlines are inclined to report their lease liabilities as a separate line item on face of the statement of financial position rather than within a certain current/non-current liability account such as financial liabilities.

This hypothesis was accepted by the research findings because 77% of the airlines report their lease liabilities as separate line item on the statement of financial position as seen on Figure 1 versus the remaining 23 % classify these items within "long-term debt and lease liabilities" account, or within "other financial liabilities" account, or within "loan borrowing including lease liabilities" account, or within "borrowings" account, or within "financial liabilities" account, or within "borrowings and lease liabilities" account.




| | Right of Use Assets | | Lease Liabilities | |
|---|---|---|---|---|
| | Separately Presented | Not Separetly Presented | Separately Presented | Not Separetly Presented |
| Americas | 3 | 6 | 7 | 2 |
| Europe | 12 | 10 | 16 | 6 |
| Middle-East & Africa | 7 | 0 | 6 | 1 |
| Asia-Pacific | 9 | 1 | 8 | 2 |
| China & Northern Asia | 4 | 1 | 4 | 1 |

**Figure 1: Presentation of Right-of-Use Assets and Lease Liabilities on the Statement of Financial Position**

Research reveals that the preparers of financial information are in favor of reporting of right-of-use assets and lease liabilities as a separate line item to provide the users of financial information the opportunity to explicitly analyze the relative magnitude or size of such asset and liability items directly from the statement.

On the other hand, airlines that reflect such asset and liabilities into certain accounts forward the users of financial information into the designated note of the statement of financial position, but such an action leads to facing with and dealing with information overload because one disclosure covers both lease related and non-lease related information at once. This makes the understanding of the users of financial information complicated.

## 4.3 EXAMPLES OF PRESENTATION OF LEASED ASSETS AND LIABILITIES

### 4.3.1 Presentation on the Face of the Statement of Financial Position

As seen on Table 8, partial balance sheet shows the amount of right-of-use assets €5,173 for the year 2019 as a separate line item within the non-current assets.

**Table 8: Partial Balance Sheet of Air France - KLM for Right-of-Assets**

| Assets (in € millions) | Notes | December 31, 2019 | December 31, 2018 restated (1) | January 1, 2018 restated (1) |
|---|---|---|---|---|
| Goodwill | 15 | **217** | 217 | 216 |
| Intangible assets | 16 | **1,305** | 1,194 | 1,122 |
| Flight equipment | 18 | **11,334** | 10,308 | 9,728 |
| Other property, plant and equipment | 18 | **1,580** | 1,503 | 1,418 |
| Right-of-use assets | 20 | **5,173** | 5,664 | 6,216 |
| Investments in equity associates | 21 | **307** | 311 | 301 |
| Pension assets | 22 | **420** | 331 | 590 |
| Other financial assets | 23 | **1,096** | 1,487 | 1,242 |
| Deferred tax assets | 13.4 | **523** | 559 | 417 |
| Other non-current assets | 26 | **241** | 264 | 239 |
| **Total non-current assets** | | **22,196** | **21,838** | **21,489** |

**Source: Air France – KLM (2019; 236)**

As seen on Table 9, partial balance sheet shows current portion of lease liabilities €971 and non-current portion €3,149 for the year 2019 as a separate line within the lease debt account.

**Table 9: Partial Balance Sheet of Air France - KLM for Lease Liabilities**

| | | | | |
|---|---|---|---|---|
| Pension provisions | 29 | **2,253** | 2,098 | 2,202 |
| Return obligation liability and other provisions | 30 | **3,750** | 3,657 | 3,707 |
| Financial debt | 31 | **6,271** | 5,733 | 5,919 |
| Lease debt | 32 | **3,149** | 3,546 | 3,940 |
| Deferred tax liabilities | 13.4 | **142** | 4 | - |
| Other non-current liabilities | 35 | **222** | 459 | 361 |
| **Total non-current liabilities** | | **15,787** | **15,497** | **16,129** |
| Return obligation liability and other provisions | 30 | **714** | 505 | 255 |
| Current portion of financial debt | 31 | **842** | 826 | 1,378 |
| Lease debt | 32 | **971** | 989 | 993 |
| Trade payables | | **2,379** | 2,454 | 2,368 |
| Deferred revenue on ticket sales | | **3,289** | 3,153 | 3,017 |
| Frequent flyer programs | 34 | **848** | 844 | 819 |
| Other current liabilities | 35 | **3,602** | 3,566 | 3,240 |
| Bank overdrafts | 27 | **4** | 5 | 6 |
| **Total current liabilities** | | **12,649** | **12,342** | **12,076** |
| **Total liabilities** | | **28,436** | **27,839** | **28,205** |

**Source: Air France – KLM (2019; 237)**

### 4.3.2 Presentation within the Property, Plant, and Equipment

As seen on Table 10, the total value of property, plant, and equipment is equal to €19,168 of which €10,588 belongs to leased assets. In addition, interest-bearing long-term borrowings are equal to €12,411 of which € 9,352 belongs to long-term lease liabilities as well as current portion of long-term borrowings is equal to €1,843 of which €1,694 belongs to current lease liabilities. These amounts are provided in the disclosures of property, plant and equipment and borrowings of the airline company.

## Table 10: Full Balance Sheet of International Airlines Group

| € million | Note | December 31, 2019 | December 31, 2018 |
|---|---|---|---|
| **Non-current assets** | | | |
| Property, plant and equipment | 12 | **19,168** | 12,437 |
| Intangible assets | 15 | **3,442** | 3,198 |
| Investments accounted for using the equity method | 16 | **31** | 31 |
| Other equity investments | 17 | **82** | 80 |
| Employee benefit assets | 30 | **524** | 1,129 |
| Derivative financial instruments | 26 | **268** | 221 |
| Deferred tax assets | 9 | **546** | 536 |
| Other non-current assets | 18 | **273** | 309 |
| | | **24,334** | 17,941 |
| **Current assets** | | | |
| Inventories | | **565** | 509 |
| Trade receivables | 18 | **2,255** | 1,597 |
| Other current assets | 18 | **1,314** | 1,175 |
| Current tax receivable | 9 | **186** | 383 |
| Derivative financial instruments | 26 | **324** | 155 |
| Other current interest-bearing deposits | 19 | **2,621** | 2,437 |
| Cash and cash equivalents | 19 | **4,062** | 3,837 |
| | | **11,327** | 10,093 |
| **Total assets** | | **35,661** | 28,034 |
| | | | |
| **Shareholders' equity** | | | |
| Issued share capital | 27 | **996** | 996 |
| Share premium | 27 | **5,327** | 6,022 |
| Treasury shares | | **(60)** | (68) |
| Other reserves | 29 | **560** | (236) |
| **Total shareholders' equity** | | **6,823** | 6,714 |
| Non-controlling interest | 29 | **6** | 6 |
| **Total equity** | | **6,829** | 6,720 |
| **Non-current liabilities** | | | |
| Interest-bearing long-term borrowings | 23 | **12,411** | 6,633 |
| Employee benefit obligations | 30 | **328** | 289 |
| Deferred tax liability | 9 | **572** | 453 |
| Provisions | 24 | **2,416** | 2,268 |
| Derivative financial instruments | 26 | **286** | 423 |
| Other long-term liabilities | 22 | **71** | 198 |
| | | **16,084** | 10,264 |
| **Current liabilities** | | | |
| Current portion of long-term borrowings | 23 | **1,843** | 876 |
| Trade and other payables | 20 | **4,344** | 3,959 |
| Deferred revenue on ticket sales | 21 | **5,486** | 4,835 |
| Derivative financial instruments | 26 | **252** | 656 |
| Current tax payable | 9 | **192** | 165 |
| Provisions | 24 | **631** | 559 |
| | | **12,748** | 11,050 |
| **Total liabilities** | | **28,832** | 21,314 |
| **Total equity and liabilities** | | **35,661** | 28,034 |

**Source: IAG (2019; 134)**

# CHAPTER 5

# FINDINGS ON FINANCIAL RATIOS BASED ON THE FIRST-TIME ADOPTION OF IFRS 16 THROUGH FULL-RETROSPECTIVE BASIS

This chapter provides research findings about the effect of IFRS 16 over the asset and liability structure, liquidity, solvency, and profitability of airlines through full-retrospective basis.

## 5.1 ANALYSIS OF CHANGE IN ASSETS AND LIABILITIES

On the statement of financial position, right-of-use assets are part of total assets, and they are classified within non-current assets as well as the lease liabilities related to right-of-use assets are classified within current and non-current liabilities. Because IFRS 16 requires the reflection of all leases regardless of its type either operating lease or finance lease into the statement of financial position except for the exemption of short-term leases and leases of low-value assets (IFRS 16.5), an upward trend of total assets and non-current assets as well as current and non-current liabilities are expected at different levels depending on the lease composition of an entity.

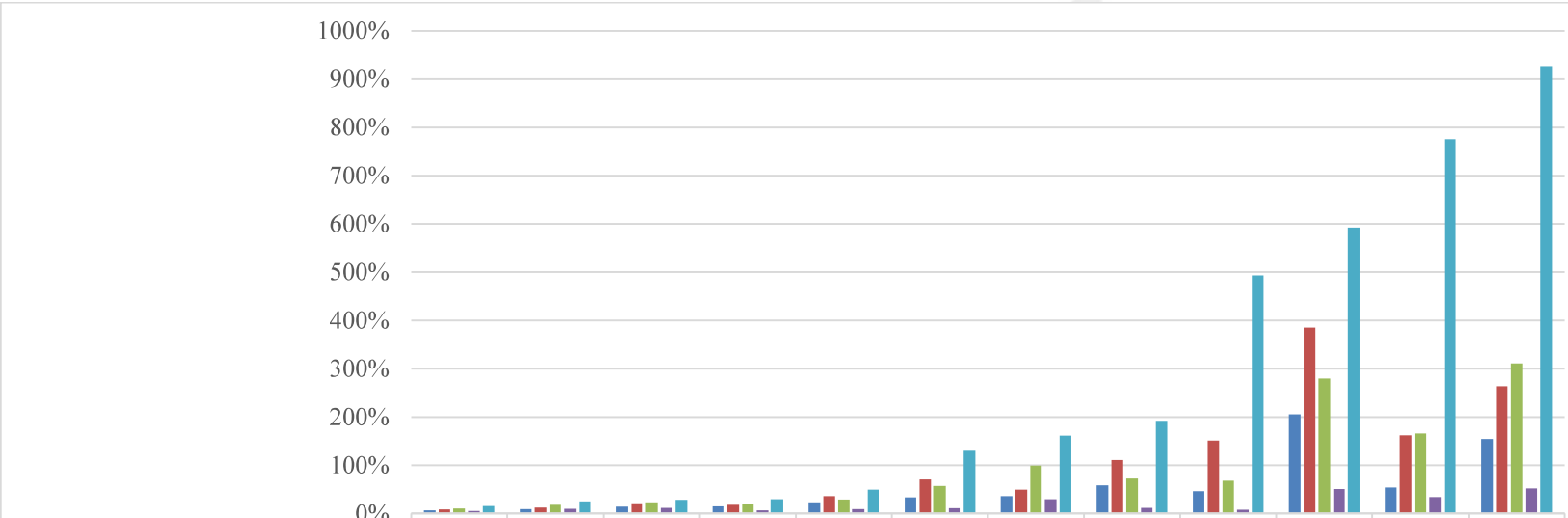
In the context of the airline industry, the following research results have been gathered considering the 12 airlines adopting IFRS 16 on a full-retrospective basis. In this context, Figure 2 ranks these airlines considering their increasing percentage of non-current liabilities rather than other parameters because long-term liabilities are significantly affected due to the long-term nature of leases.

(1) Figure 2 indicates that each airline' total assets and total liabilities increase from prior year to restated prior year when leases are reflected on the statement of financial position on a range from 6% to 206%.

(2) Figure 2 reveals that each airline's total non-current assets as well as total non-current liabilities increase from prior year to restated prior year when leases are reflected on the statement of financial position on a range from 8% to 385% in the

context of total non-current assets and on a range from 15% to 927% in the context of total non-current liabilities. Such increasing trend of total non-current assets and non-current liabilities from Qantas to Aeroflot is significant depending on the airline's leased asset composition because the higher the operating leases that were not reflected on the statement of financial position before the adoption of IFRS 16, the higher the change in total non-current assets as well as total non-current liabilities after the adoption of IFRS 16 as it is the case of Wizzair, Aeroflot, and Volaris.

(3) Figure 2 indicates that each airline's total current liabilities increase from prior year to restated prior year when leases are reflected on the statement of financial position on a range from 5% to 52% but not as much as non-current liabilities because lease arrangements are usually long-term and such long-term leases are transferred from non-current to current liabilities when their maturity is up to one year.




| | Qantas | Copa | Air Canada | Latam | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizz Air | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Change in total assets | 6% | 9% | 14% | 14% | 23% | 34% | 36% | 59% | 47% | 206% | 54% | 154% |
| Change in non-current assets | 8% | 12% | 21% | 18% | 36% | 71% | 50% | 111% | 151% | 385% | 162% | 264% |
| Change in total liabilities | 10% | 18% | 23% | 20% | 29% | 57% | 100% | 73% | 68% | 279% | 166% | 311% |
| Change in current liabilities | 5% | 10% | 11% | 7% | 9% | 11% | 30% | 11% | 7% | 51% | 35% | 52% |
| Change in non-current liabilities | 15% | 25% | 28% | 30% | 50% | 130% | 162% | 192% | 493% | 592% | 776% | 927% |

**Figure 2: Change in Assets and Liabilities of Airlines Considering the Adoption of IFRS 16 under Full-Retrospective Basis**

## 5.2. LIQUIDITY ANALYSIS

In this analysis, this thesis focuses on Net Working Capital, Current Ratio, and (CFO / Average Current Liabilities) ratio.

a. **H1:** The decreasing trend of Net Working Capital ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings because each airline's current liabilities increased after the restatement to reflect the effect of current portion of the long-term leases that was not reported on the statement of financial position before the adoption of IFRS 16. Therefore, each airline's ability to meet its current liabilities with its current assets declined. This is verified by the decline in Net Working Capital ratio in monetary terms.

As seen on Figure 3, Qantas experienced a 10% decline in its Net Working Capital in Australian million dollars after the restatement from prior year to restated prior year.

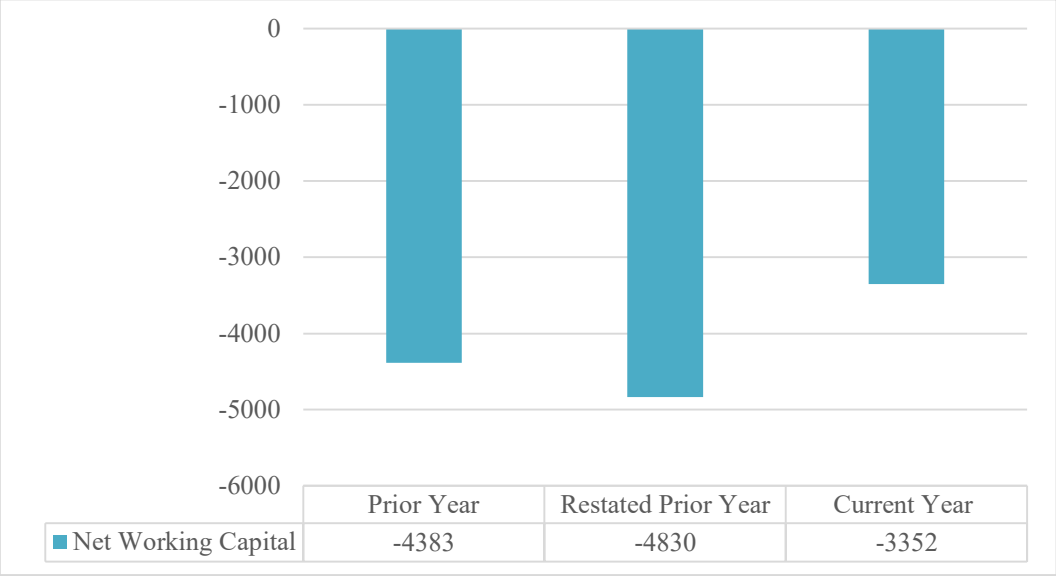



**Figure 3: Net Working Capital Before and After the Restatement of Qantas**

As seen on Figure 4, Copa Airlines experienced a 625% decline in its Net Working Capital in United States thousand dollars after the restatement from prior year to restated prior year.

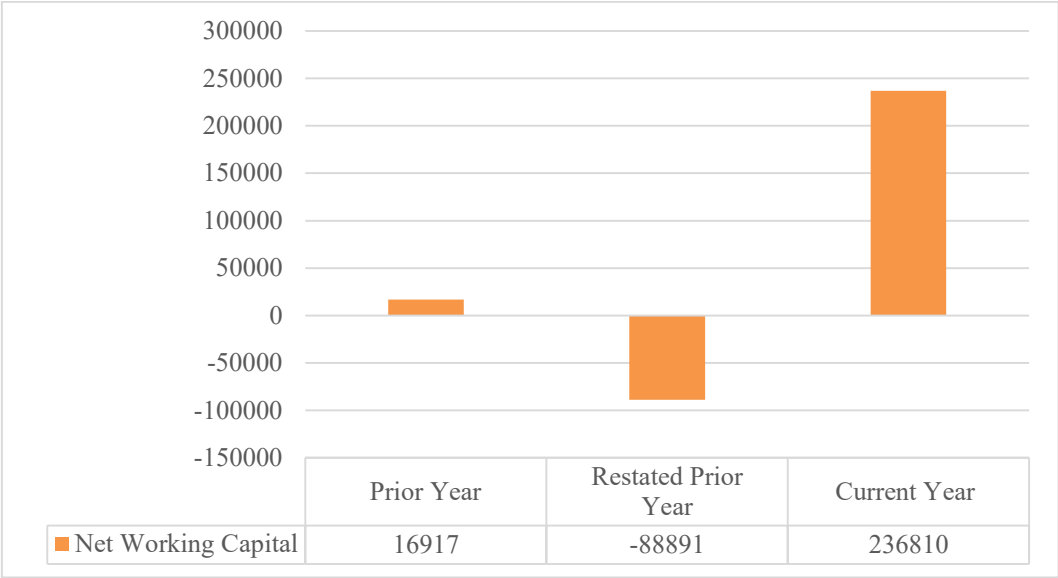



**Figure 4: Copa's Net Working Capital Before and After the Restatement**

As seen on Figure 5, Latam Airlines experienced a 17% decline in its Net Working Capital in United States Dollars after the restatement from prior year to restated prior year.

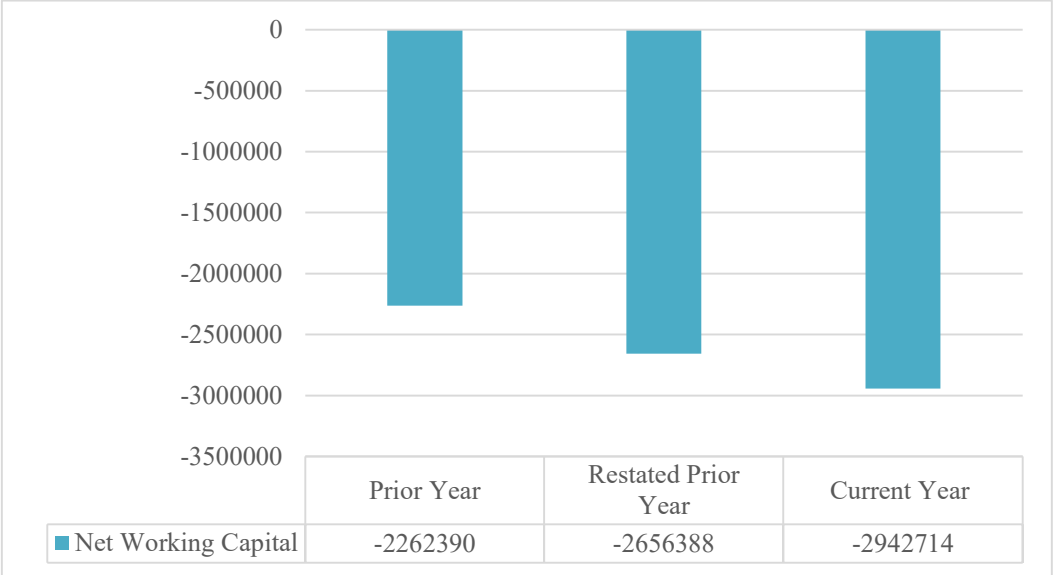



**Figure 5: Latam's Net Working Capital Before and After the Restatement**

As seen on Figure 6, Air Canada experienced a 48% decline in its Net Working Capital in Canadian dollars in millions after the restatement from prior year to restated prior year.

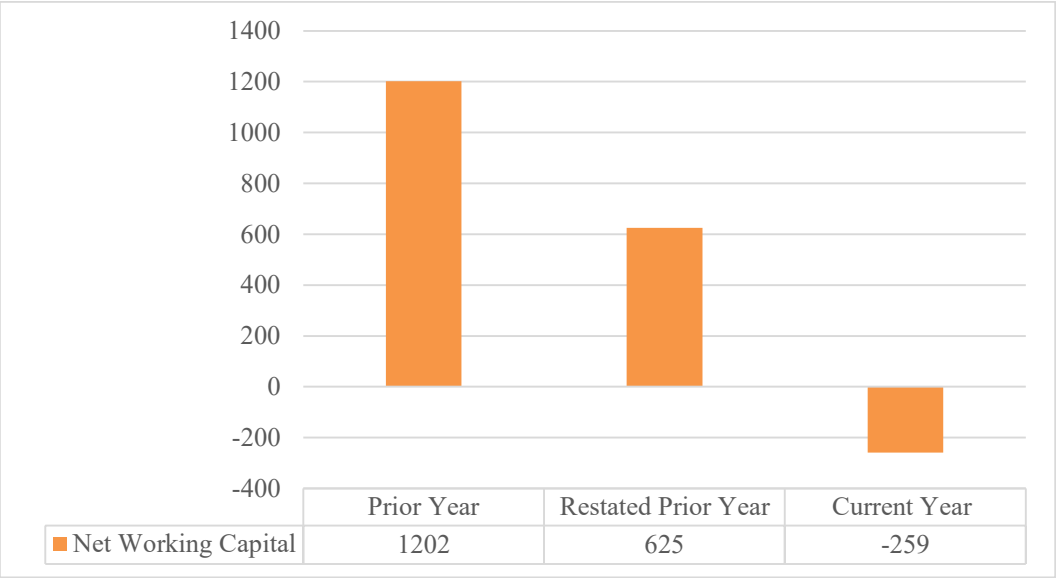



**Figure 6: Air Canada's Net Working Capital Before and After the Restatement**

As seen on Figure 7, Air France – KLM experienced a 50% decline in its Net Working Capital in Euro after the restatement from prior year to restated prior year.

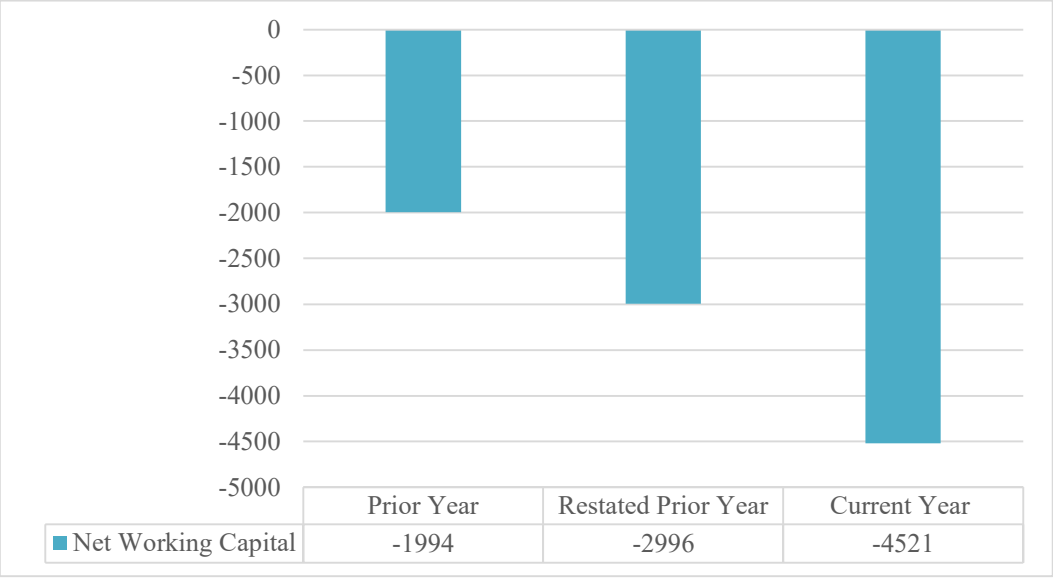



**Figure 7: Net Working Capital Before and After the Restatement of Air France-KLM**

As seen on Figure 8, Finnair experienced a 56% decline in its Net Working Capital in Euro after the restatement from prior year to restated prior year.

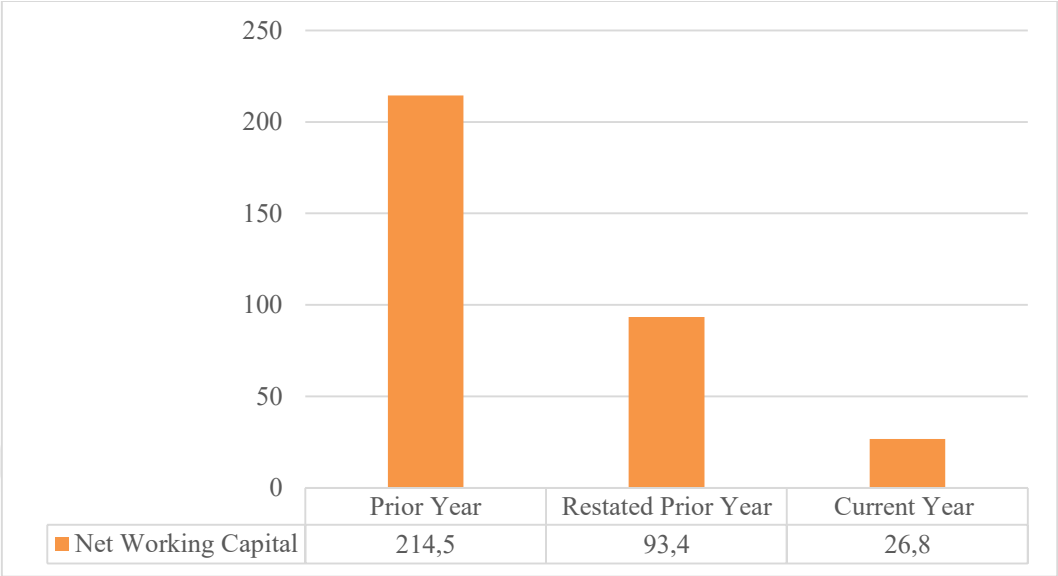



**Figure 8: Finnair's Net Working Capital Before and After the Restatement**

As seen on Figure 9, Azul Airlines experienced a 196% decline in its Net Working Capital in thousands of Brazilian reais after the restatement from prior year to restated prior year.

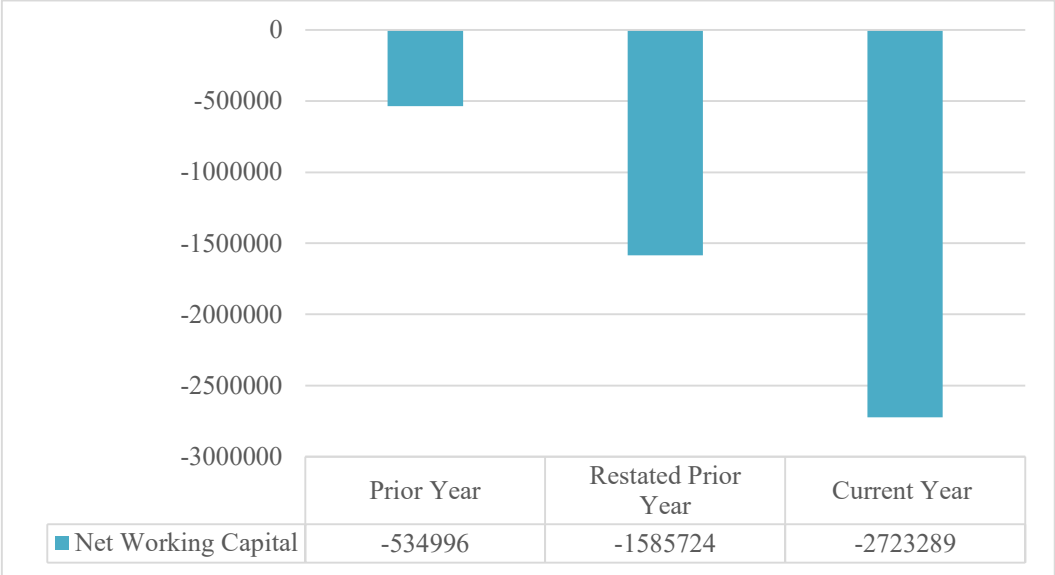



**Figure 9: Azul's Net Working Capital Before and After the Restatement**

As seen on Figure 10, Virgin experienced a 42% decline in its Net Working Capital in million pounds after the restatement from prior year to restated prior year.

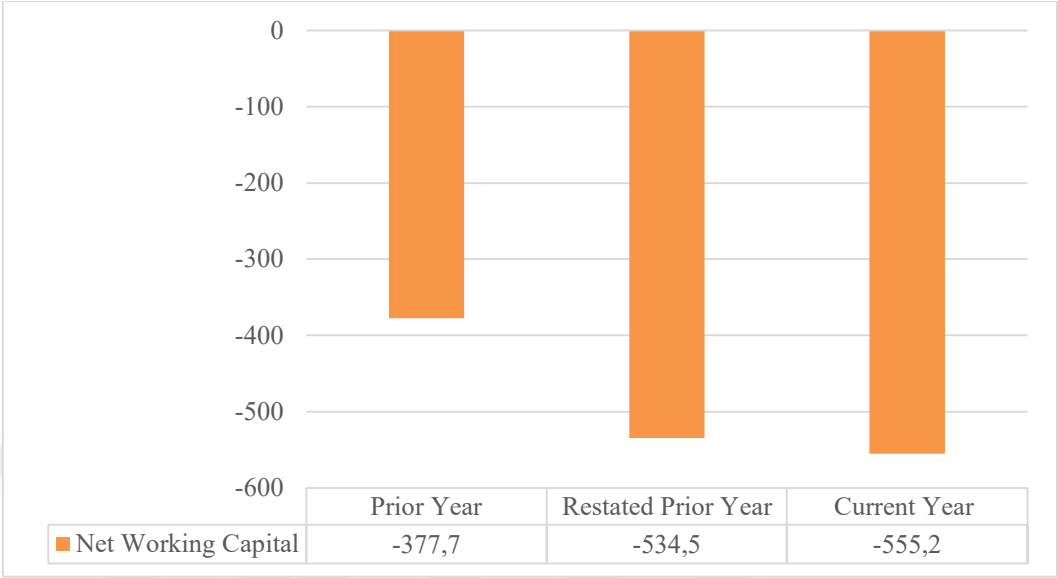



**Figure 10: Virgin's Net Working Capital Before and After the Restatement**

As seen on Figure 11, Air Transat experienced a 37% decline in its Net Working Capital in thousands of Canadian dollars after the restatement from prior year to restated prior year.

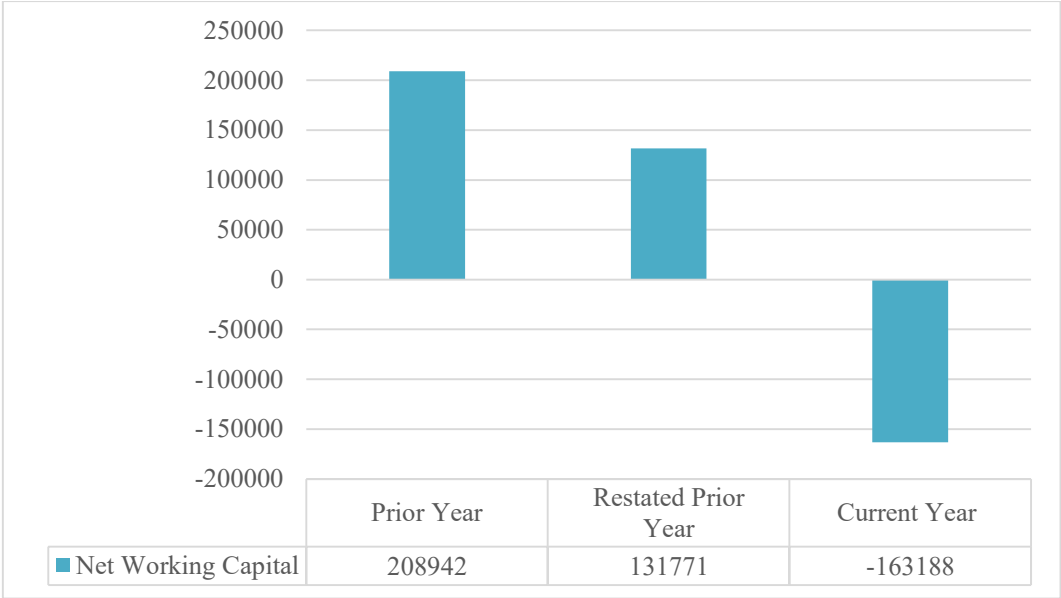



**Figure 11: Air Transat's Net Working Capital Before and After the Restatement**

As seen on Figure 12, Aeroflot experienced a 767% decline in its Net Working Capital in millions of Russian Roubles after the restatement from prior year to restated prior year.

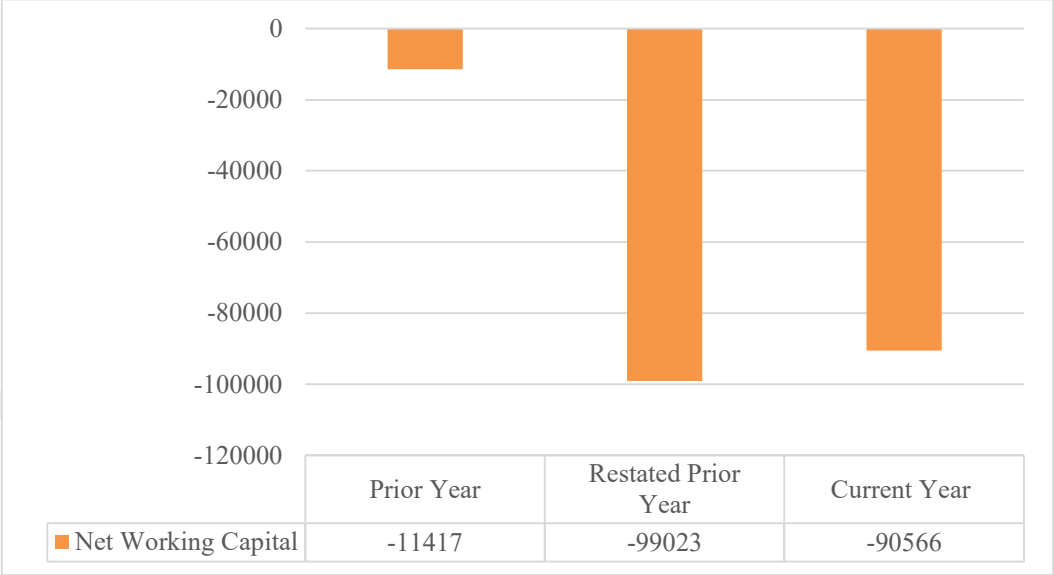



**Figure 12: Aeroflot's Net Working Capital Before and After the Restatement**

As seen on Figure 13, Wizzair experienced a 37% decline in its Net Working Capital in million Euros after the restatement from prior year to restated prior year.

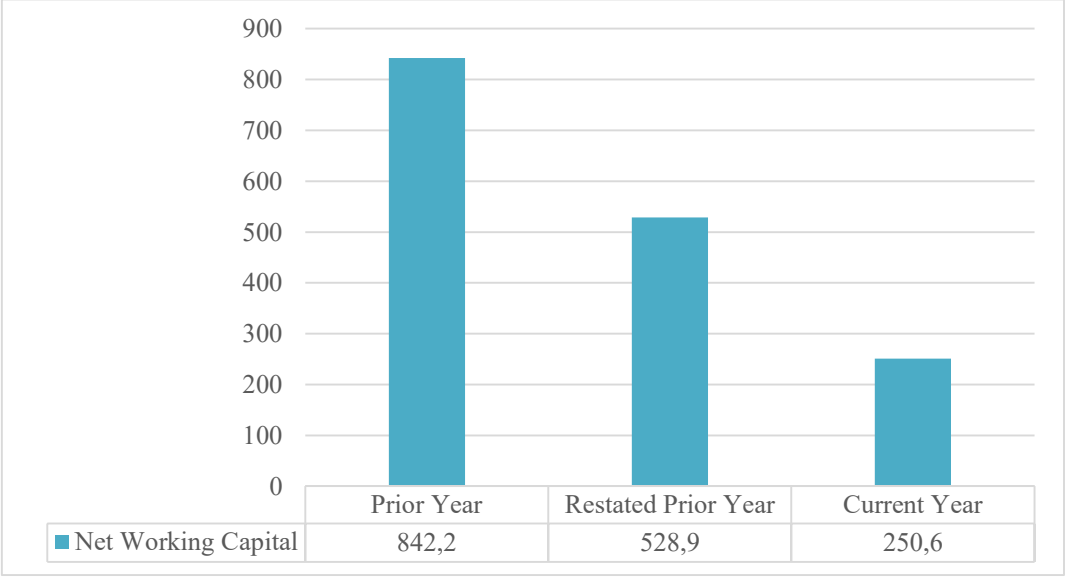



**Figure 13: Wizzair's Net Working Capital Before and After the Restatement**

As seen on Figure 14, Volaris experienced an 8568% decline in its Net Working Capital in thousands of Mexican pesos after the restatement from prior year to restated prior year.

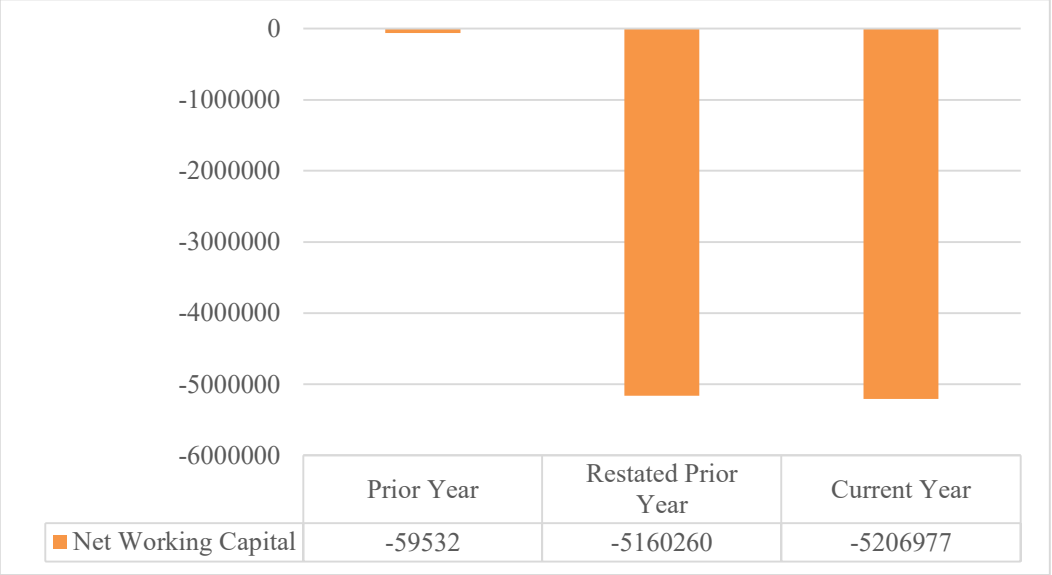
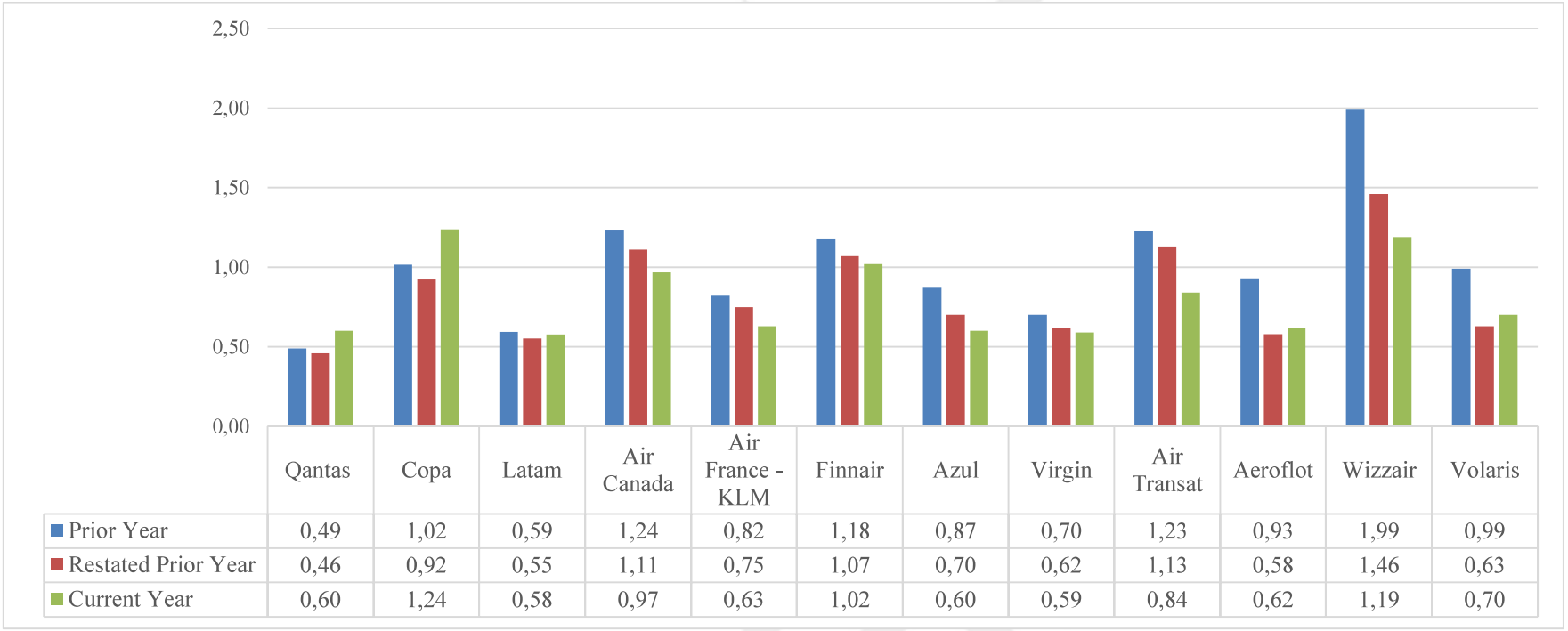



**Figure 14: Net Working Capital Before and After the Restatement of Volaris**

b. **H2:** The decreasing trend of Current Ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings because each airline's current liabilities increased after the restatement to reflect the effect of current portion of the long-term leases that was not reported on the statement of financial position before the adoption of IFRS 16. Therefore, each airline's ability to meet its current liabilities with its current assets declined. This is also verified by Current Ratio in addition to Net Working Capital as seen on Figure 15.




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,49 | 1,02 | 0,59 | 1,24 | 0,82 | 1,18 | 0,87 | 0,70 | 1,23 | 0,93 | 1,99 | 0,99 |
| Restated Prior Year | 0,46 | 0,92 | 0,55 | 1,11 | 0,75 | 1,07 | 0,70 | 0,62 | 1,13 | 0,58 | 1,46 | 0,63 |
| Current Year | 0,60 | 1,24 | 0,58 | 0,97 | 0,63 | 1,02 | 0,60 | 0,59 | 0,84 | 0,62 | 1,19 | 0,70 |

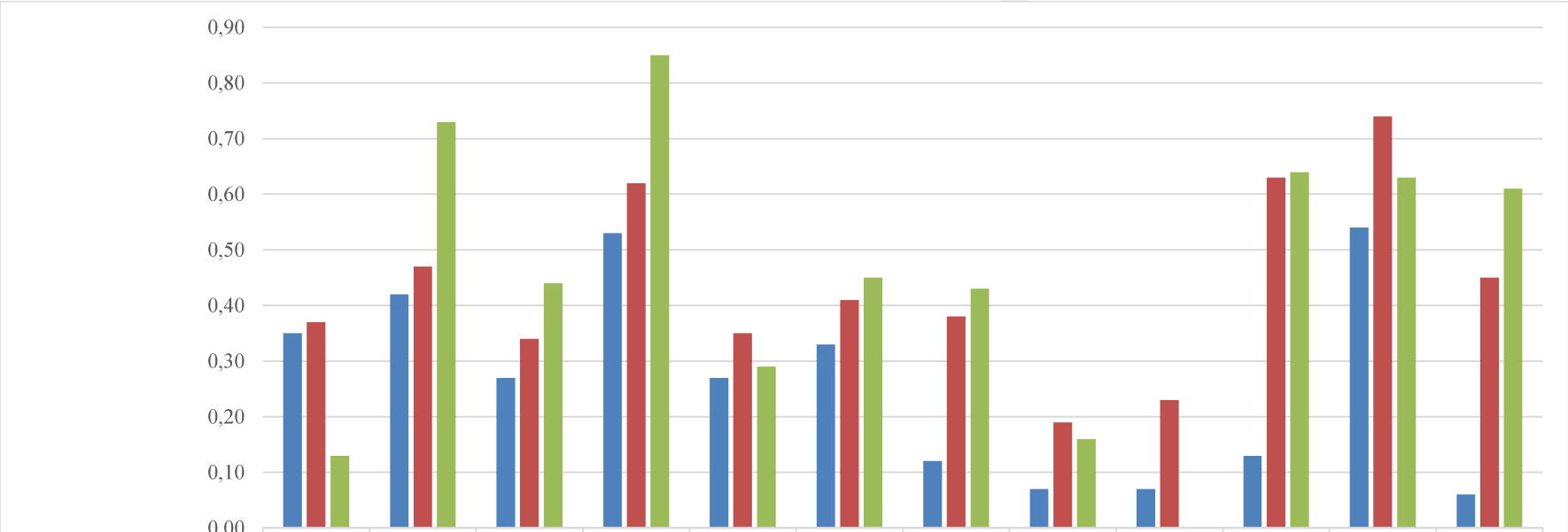
**Figure 15: Current Ratio Before and After the Restatement**

c. **H3:** The increase in (CFO /Average Current Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings because each airline's CFO increased after the adoption of IFRS 16 greater than the increase in current liabilities because calculation of CFO is based on net income adjusted from accrual basis to cash basis of accounting.

In this context, IFRS 16 cancels the operating lease expenses that were recorded as expense in the prior period and such cancelled expenses were replaced by depreciation expenses and interest expenses when preparing the restated prior period net income. Because restated net income plus restated depreciation expenses and restated interest expenses is used to calculate adjusted CFO, IFRS 16 leads to an increase in CFO. Therefore, this ratio has an upward trend after the restatement as seen on Figure 16.

On Figure 16, the only exception that has been done is not to report the current year's ratio for Air Transat because this airline's CFO turned out to be negative in current year. Due to the negative numerator, this ratio is not meaningful to declare.




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,35 | 0,42 | 0,27 | 0,53 | 0,27 | 0,33 | 0,12 | 0,07 | 0,07 | 0,13 | 0,54 | 0,06 |
| Restated Prior Year | 0,37 | 0,47 | 0,34 | 0,62 | 0,35 | 0,41 | 0,38 | 0,19 | 0,23 | 0,63 | 0,74 | 0,45 |
| Current Year | 0,13 | 0,73 | 0,44 | 0,85 | 0,29 | 0,45 | 0,43 | 0,16 | | 0,64 | 0,63 | 0,61 |

**Figure 16: (CFO / Average Current Liabilities) Before and After the Restatement**

## 5.3. SOLVENCY ANALYSIS

a. **H4:** The increase in (Total Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings for all airlines except for Azul Brazilian Airlines, Virgin Atlantic Airlines, and Aeroflot on Figure 17 because each airline reports more liabilities than before through the adoption of IFRS 16 within the current and non-current liabilities.

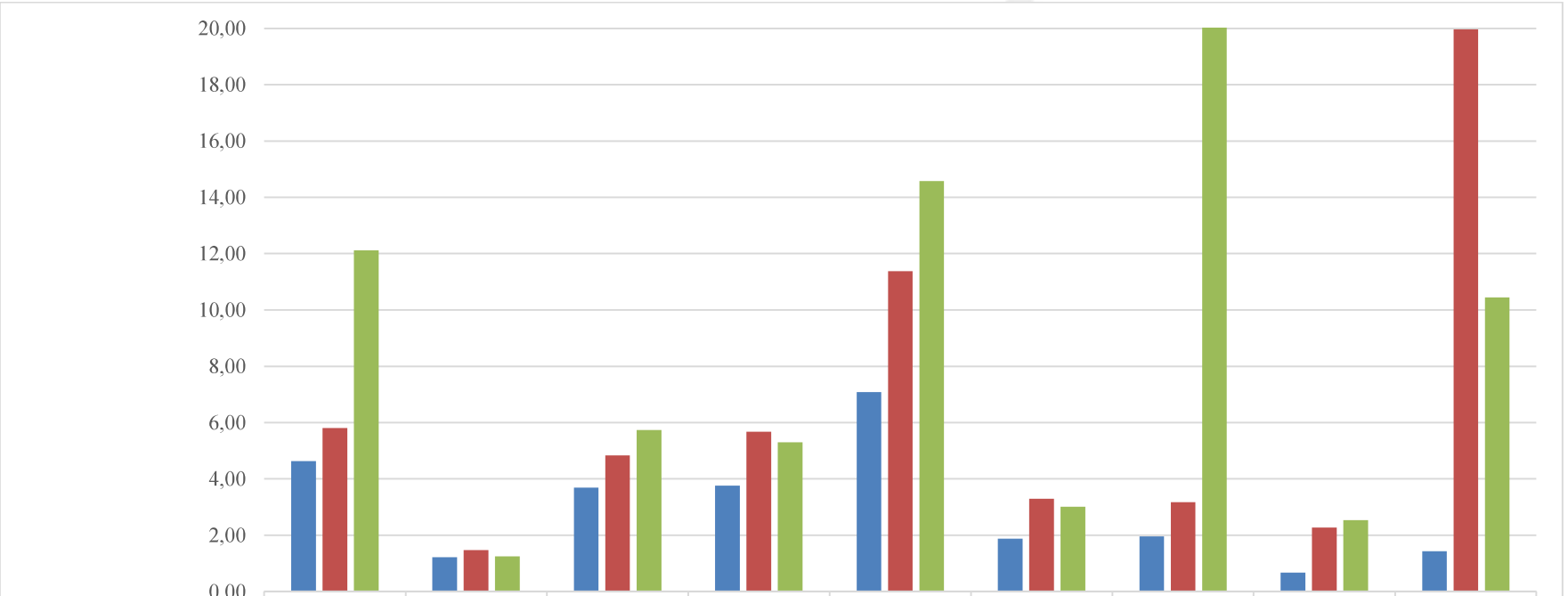
On the other hand, debt to equity ratio of Azul Brazilian Airlines, Virgin Atlantic Airlines, and Aeroflot turned out to be negative from prior year to restated prior year, because these airlines experienced a huge loss on net income after the adoption of IFRS 16 due to increase in depreciation expenses as well as interest expenses. Either profit turned out to be loss or the loss turned out to be a huge loss. Such losses lead to negative equity leading to negative debt to equity ratio. A ratio with a negative denominator is not meaningful to declare. Therefore, these airlines are not shown on Figure 17.

b. **H5:** The increase in (Total Current Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings for all airlines except for Azul Brazilian Airlines, Virgin Atlantic Airlines, and Aeroflot as seen on Figure 18 because each airline reports more current liabilities than before through the adoption of IFRS 16 within the current liabilities. In addition, the case of negative equity mentioned above is valid for this ratio as well.

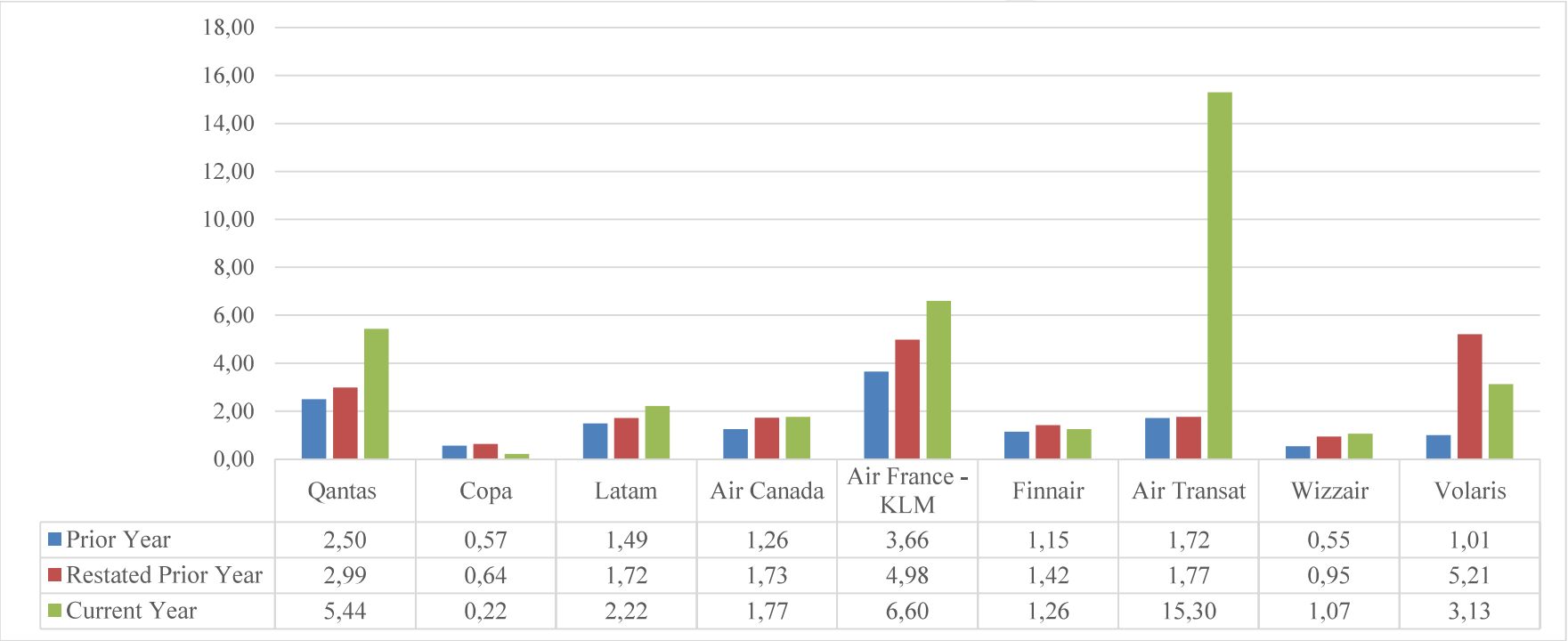
c. **H6:** The increase in (Total Non-Current Liabilities/Equity) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings for all airlines except for Azul Brazilian Airlines, Virgin Atlantic Airlines, and Aeroflot as seen on Figure 19 because each airline reports more non-current liabilities than before through the adoption of IFRS 16 within the non-current liabilities. In addition, the case of negative equity mentioned above is valid for this ratio as well.



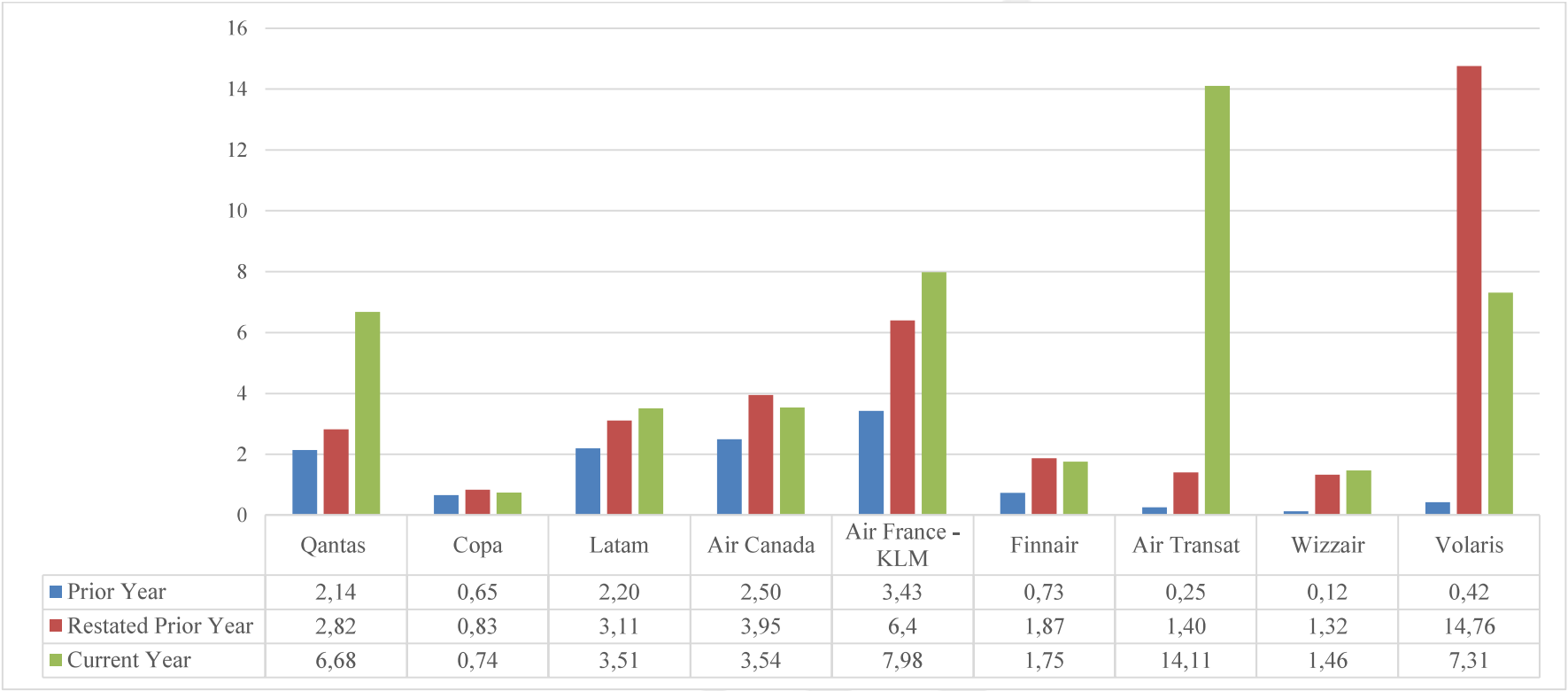

| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Air Transat | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 4,64 | 1,22 | 3,69 | 3,76 | 7,09 | 1,88 | 1,96 | 0,67 | 1,43 |
| Restated Prior Year | 5,81 | 1,47 | 4,84 | 5,68 | 11,38 | 3,29 | 3,17 | 2,27 | 19,97 |
| Current Year | 12,12 | 1,25 | 5,74 | 5,31 | 14,58 | 3,01 | 29,41 | 2,53 | 10,45 |

**Figure 17: (Total Liabilities / Equity) Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Air Transat | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 2,50 | 0,57 | 1,49 | 1,26 | 3,66 | 1,15 | 1,72 | 0,55 | 1,01 |
| Restated Prior Year | 2,99 | 0,64 | 1,72 | 1,73 | 4,98 | 1,42 | 1,77 | 0,95 | 5,21 |
| Current Year | 5,44 | 0,22 | 2,22 | 1,77 | 6,60 | 1,26 | 15,30 | 1,07 | 3,13 |

**Figure 18: (Total Current Liabilities / Equity) Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Air Transat | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 2,14 | 0,65 | 2,20 | 2,50 | 3,43 | 0,73 | 0,25 | 0,12 | 0,42 |
| Restated Prior Year | 2,82 | 0,83 | 3,11 | 3,95 | 6,4 | 1,87 | 1,40 | 1,32 | 14,76 |
| Current Year | 6,68 | 0,74 | 3,51 | 3,54 | 7,98 | 1,75 | 14,11 | 1,46 | 7,31 |

**Figure 19: (Total Non-Current Liabilities / Equity) Before and After the Restatement**

d. **H7:** The increase in (Total Liabilities/ Total Assets) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings for all airlines as seen on Figure 20 because each airline reports more liabilities than before through the adoption of IFRS 16 to finance its assets. In addition, this ratio also verifies that total liabilities are greater than total assets for the cases of Azul Brazilian Airlines, Virgin Atlantic Airlines, and Aeroflot after the restatement referring to negative equity.

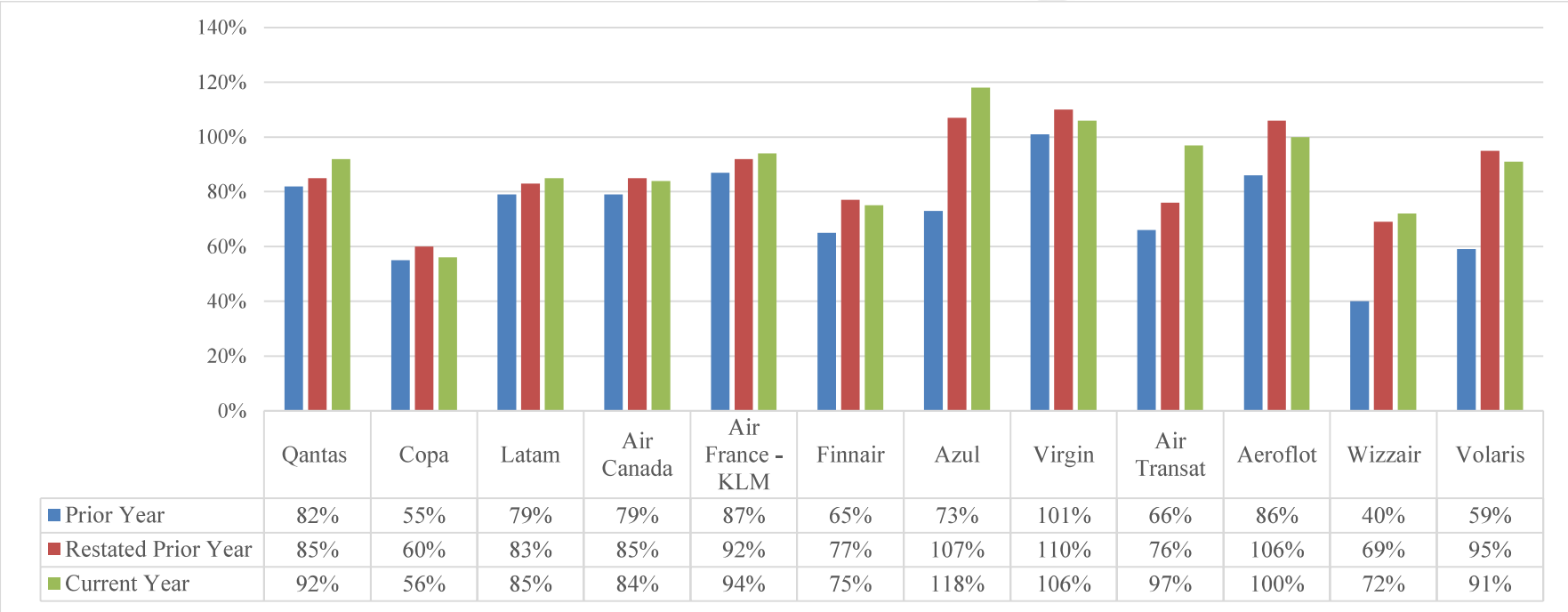
e. **H8:** The decrease in (CFO /Average Non-Current Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was rejected by the research findings because the change of this ratio from prior year to restated prior year is based on the adjusted CFO and adjusted average non-current liabilities. Therefore, the effect of such adjustments determines the direction reflecting the effect of the adoption of IFRS 16 as seen on Figure 21. In this context, (1) 6 airlines (Qantas, Copa Airlines, Air France – KLM, Finnair, Air Transat, and Wizzair) declared a decline of this ratio versus (2) 4 airlines (Latam, Azul, Aeroflot and Volaris) declared an increase of this ratio from prior year to restated prior year; and (3) 2 airlines (Air Canada and Virgin) reported no change.

On the other hand, this research did not report the Air Transat's ratio for the current year because the numerator is negative and thus the ratio is not meaningful.

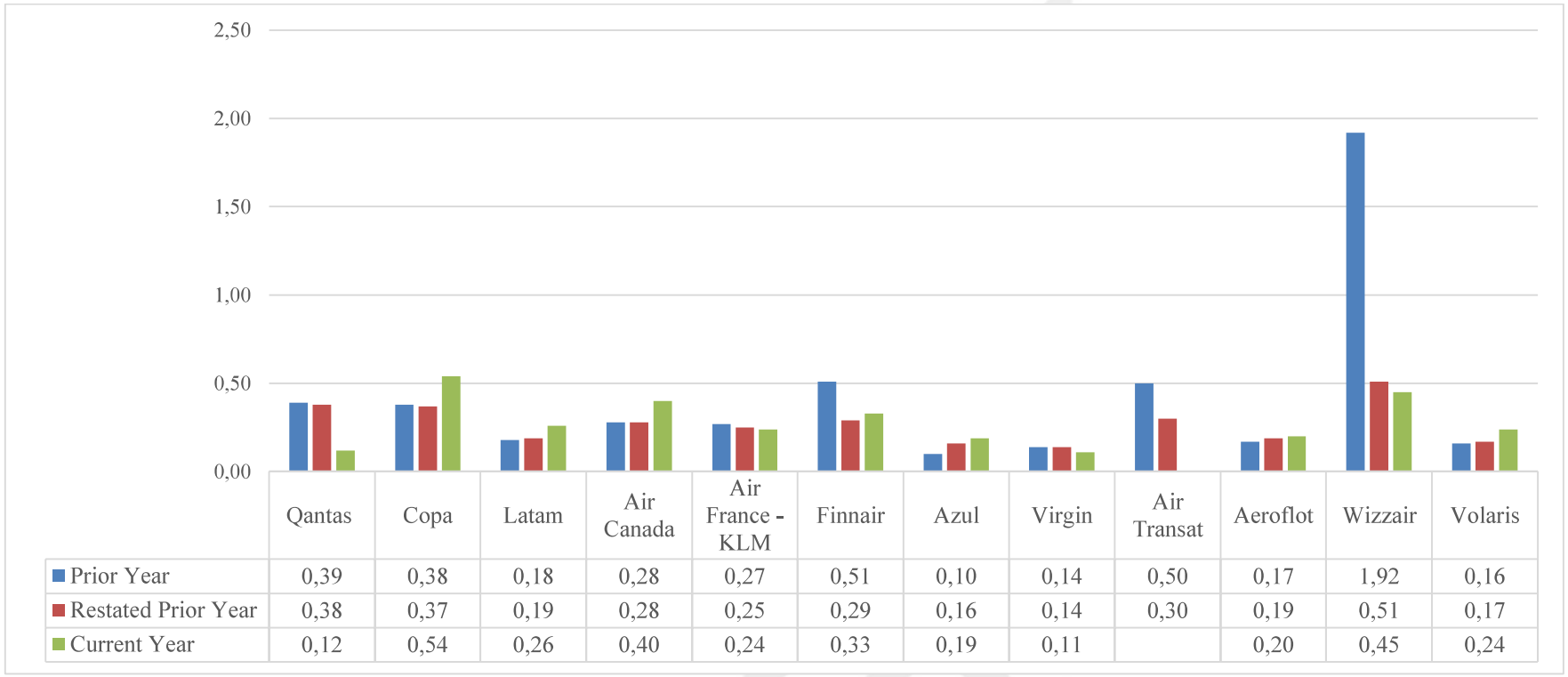
f. **H9:** The increase in (CFO /Average Total Liabilities) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was rejected by the research findings because adjusted ratio from prior year to restated prior year is based on the adjusted CFO and adjusted average total liabilities. Therefore, the effect of such adjustments determines the direction reflecting the effect of the adoption of IFRS 16 as seen on Figure 22. In this context, (1) 10 airlines (Qantas, Air Canada, Virgin, Copa Airlines, Air France – KLM, Air Transat, Latam, Azul, Aeroflot and Volaris) declared an increase versus (2) 2 airlines (Finnair and Wizzair) declared a decline of this ratio from prior year to restated prior year.



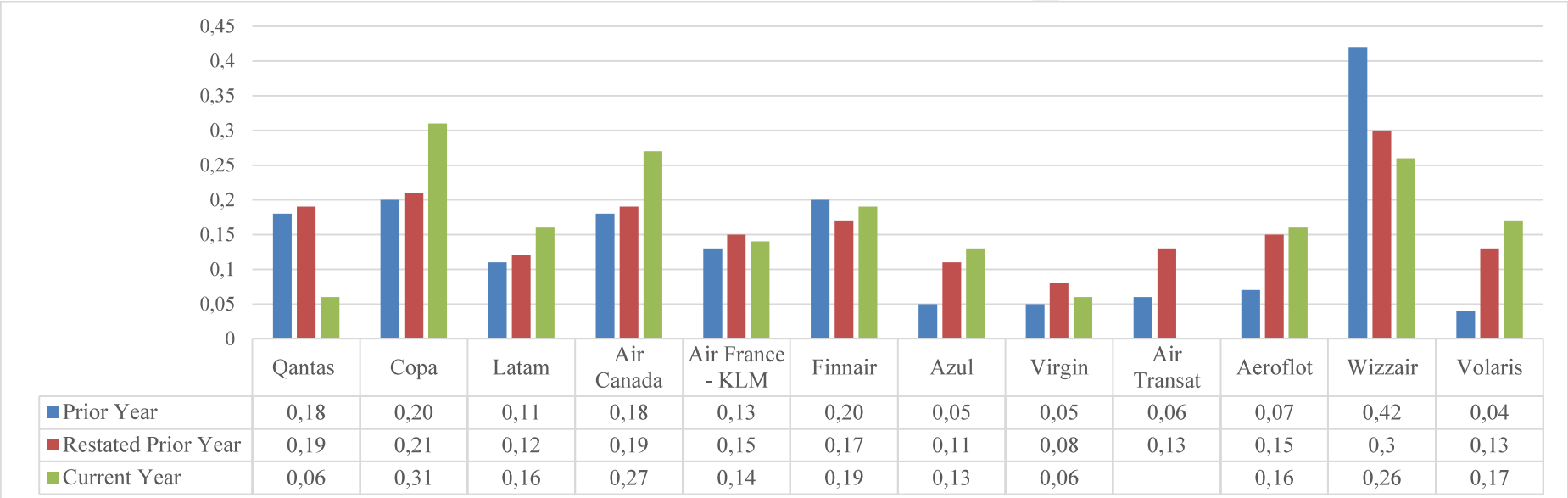

| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 82% | 55% | 79% | 79% | 87% | 65% | 73% | 101% | 66% | 86% | 40% | 59% |
| Restated Prior Year | 85% | 60% | 83% | 85% | 92% | 77% | 107% | 110% | 76% | 106% | 69% | 95% |
| Current Year | 92% | 56% | 85% | 84% | 94% | 75% | 118% | 106% | 97% | 100% | 72% | 91% |

**Figure 20: (Total Liabilities/ Total Assets) Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,39 | 0,38 | 0,18 | 0,28 | 0,27 | 0,51 | 0,10 | 0,14 | 0,50 | 0,17 | 1,92 | 0,16 |
| Restated Prior Year | 0,38 | 0,37 | 0,19 | 0,28 | 0,25 | 0,29 | 0,16 | 0,14 | 0,30 | 0,19 | 0,51 | 0,17 |
| Current Year | 0,12 | 0,54 | 0,26 | 0,40 | 0,24 | 0,33 | 0,19 | 0,11 | | 0,20 | 0,45 | 0,24 |

**Figure 21: (CFO /Average Non-Current Liabilities) Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,18 | 0,20 | 0,11 | 0,18 | 0,13 | 0,20 | 0,05 | 0,05 | 0,06 | 0,07 | 0,42 | 0,04 |
| Restated Prior Year | 0,19 | 0,21 | 0,12 | 0,19 | 0,15 | 0,17 | 0,11 | 0,08 | 0,13 | 0,15 | 0,3 | 0,13 |
| Current Year | 0,06 | 0,31 | 0,16 | 0,27 | 0,14 | 0,19 | 0,13 | 0,06 | | 0,16 | 0,26 | 0,17 |

**Figure 22: (CFO /Average Total Liabilities) Before and After the Restatement**

g. **H10:** The decrease in (EBITDA / Interest Expense) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings by all airlines except Volaris Airlines because high amounts of interest expenses were reflected on the income statement after the adoption of IFRS 16 in addition to the adjusted EBITDA. Therefore, the effect of such adjustments determines the direction reflecting the effect of the adoption of IFRS 16 as seen on Figure 23. In this context, interest coverage ability of the airlines declined.

On the other hand, the prior year interest coverage ratio of Volaris Airlines is negative due to the negative EBITDA. The negative numerator is not meaningful to declare interest meeting ability of the airline and therefore this research does not report prior year's interest coverage ratio. However, EBITDA turned out to be a positive value after the restatement of the prior year as a reflection of the cancellation of operating lease expenses leading to a positive and increasing interest coverage ratio while restated interest expense also increased. After the restatement, Volaris Airlines' interest coverage ability turned out to be positive and increased but it is almost around the same of level of some other airlines' interest coverage ratio.

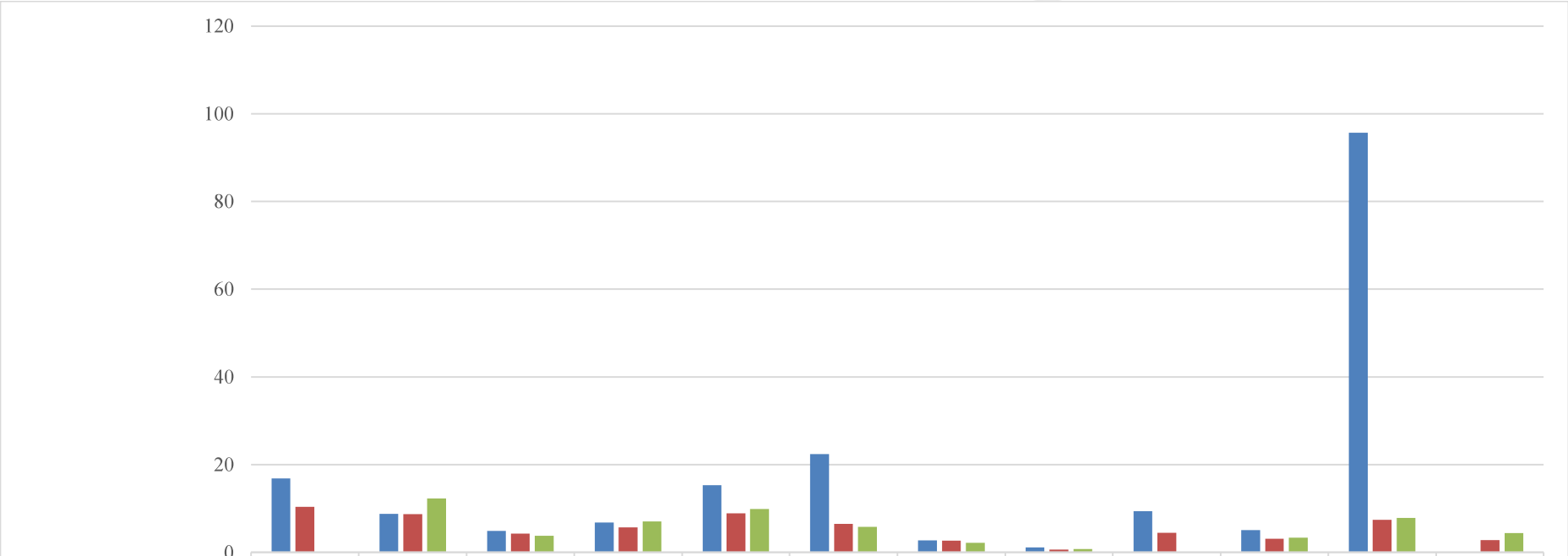
h. **H11:** The decrease in (CFO + Interest Paid / Interest Paid) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings by all airlines except Azul, Air Transat and Volaris Airlines because the maturity of high amounts of interest payments on the statement of cash flows after the adoption of IFRS 16 was reflected on the records while adjusted CFO also increased. Therefore, the effect of such adjustments determines the direction reflecting the effect of the adoption of IFRS 16 as seen on Figure 24. In this context, cash basis interest coverage ability of the airlines usually declined.

On the other hand, interest coverage ability of the Air Transat and Azul declined on the accrual basis interest coverage ratio versus increased on the cash basis interest coverage ratio because the increase in cash basis of interest coverage ratio is generated from the adding back of adjusted depreciation expense and interest expense

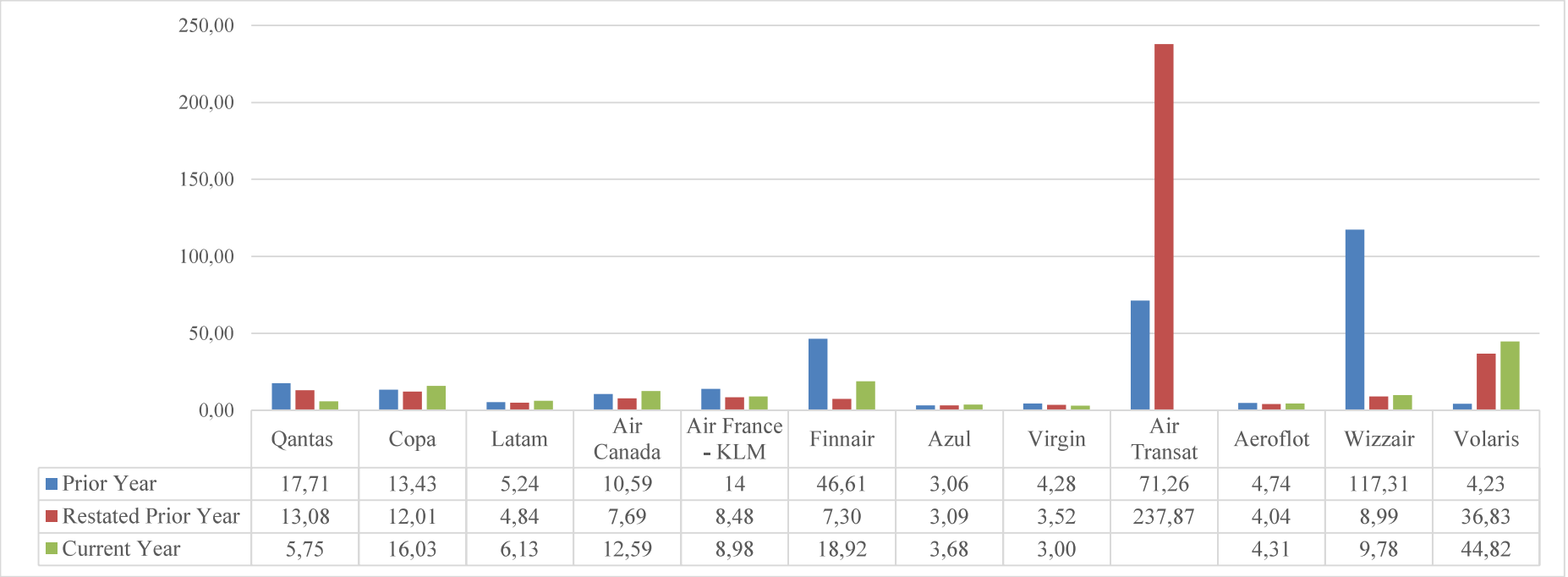
amount to restated prior year's net income. Adjusted depreciation expense and interest expense are greater than prior year's depreciation expense as well as interest expense to determine adjusted CFO as well as there is no change in interest paid for the case of Air Transat but there is a major upward change in adjusted interest paid of Azul Airlines. Due to major change in adjusted interest paid of Azul, increase in this ratio is very limited (less than 1%).

In addition, Volaris Airlines' increase in cash basis interest coverage ratio is in parallel with the increase in accrual basis interest coverage ratio because CFO from prior year to restated prior were increased due to depreciation and interest expense adjustments and there is no change in interest paid.




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 16,84 | 8,77 | 4,88 | 6,81 | 15,3 | 22,41 | 2,76 | 1,13 | 9,40 | 5,05 | 95,73 | |
| Restated Prior Year | 10,39 | 8,72 | 4,29 | 5,67 | 8,89 | 6,51 | 2,65 | 0,63 | 4,45 | 3,10 | 7,41 | 2,80 |
| Current Year | | 12,25 | 3,77 | 7,06 | 9,89 | 5,81 | 2,16 | 0,77 | | 3,36 | 7,87 | 4,40 |

**Figure 23: (EBITDA / Interest Expense) Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 17,71 | 13,43 | 5,24 | 10,59 | 14 | 46,61 | 3,06 | 4,28 | 71,26 | 4,74 | 117,31 | 4,23 |
| Restated Prior Year | 13,08 | 12,01 | 4,84 | 7,69 | 8,48 | 7,30 | 3,09 | 3,52 | 237,87 | 4,04 | 8,99 | 36,83 |
| Current Year | 5,75 | 16,03 | 6,13 | 12,59 | 8,98 | 18,92 | 3,68 | 3,00 | | 4,31 | 9,78 | 44,82 |

**Figure 24: (CFO + Interest Paid / Interest Paid) Before and After the Restatement**

## 5.4 PROFITABILITY ANALYSIS

a. **H12:** The decrease in Asset Turnover Ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings by all airlines because increase in total assets as a reflection of the adoption of IFRS 16 leads to a decline in this ratio as seen on Figure 25 as part of the decline in asset efficiency.

b. **H13:** The increase in (EBITDA / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

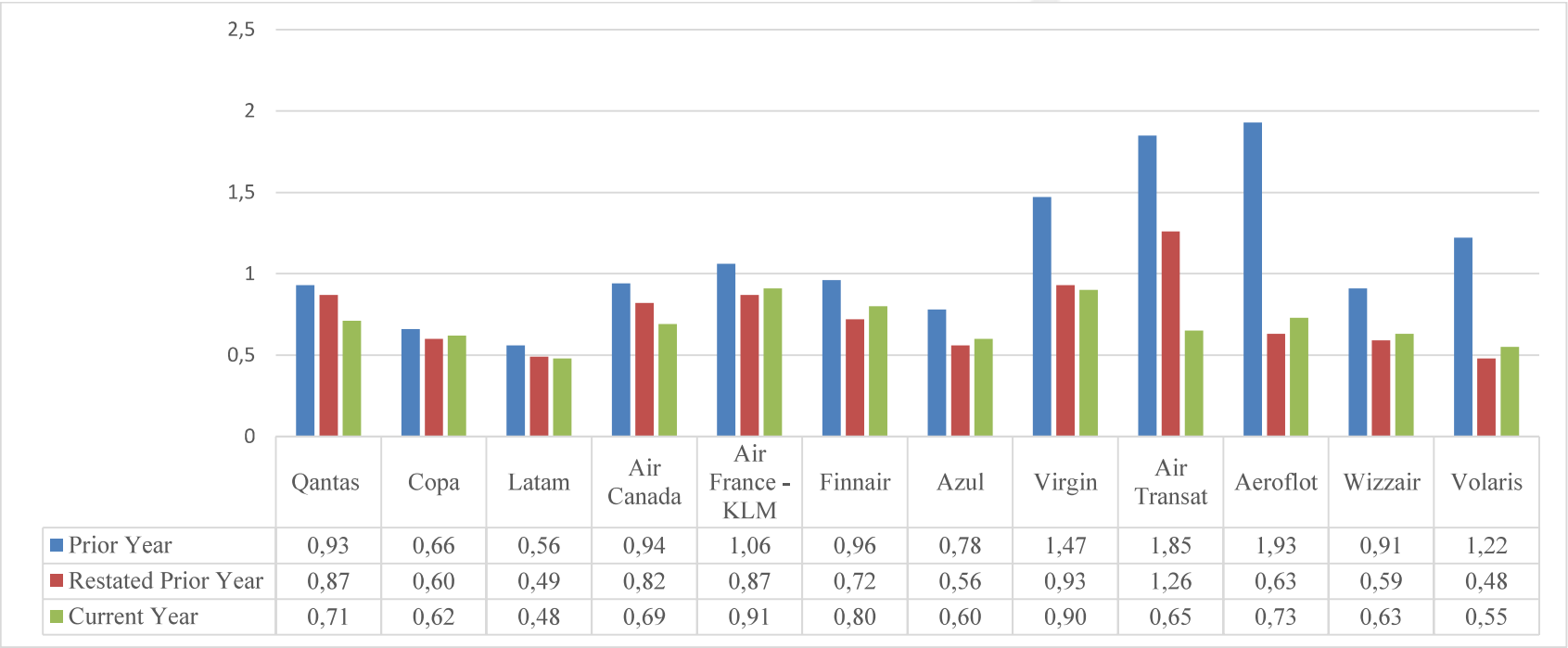
This hypothesis was accepted by the research findings by all airlines because increase in EBITDA as a reflection of the adoption of IFRS 16 leads to an increase in this ratio as seen on Figure 26.

On the other hand, EBITDA of Volaris Airlines for the prior year as well as EBITDA of Air Transat and Qantas for the current year were negative leading to a negative numerator. In this context, EBITDA / Net Sales ratio is not meaningful to declare.

c. **H14:** The increase in (EBIT / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

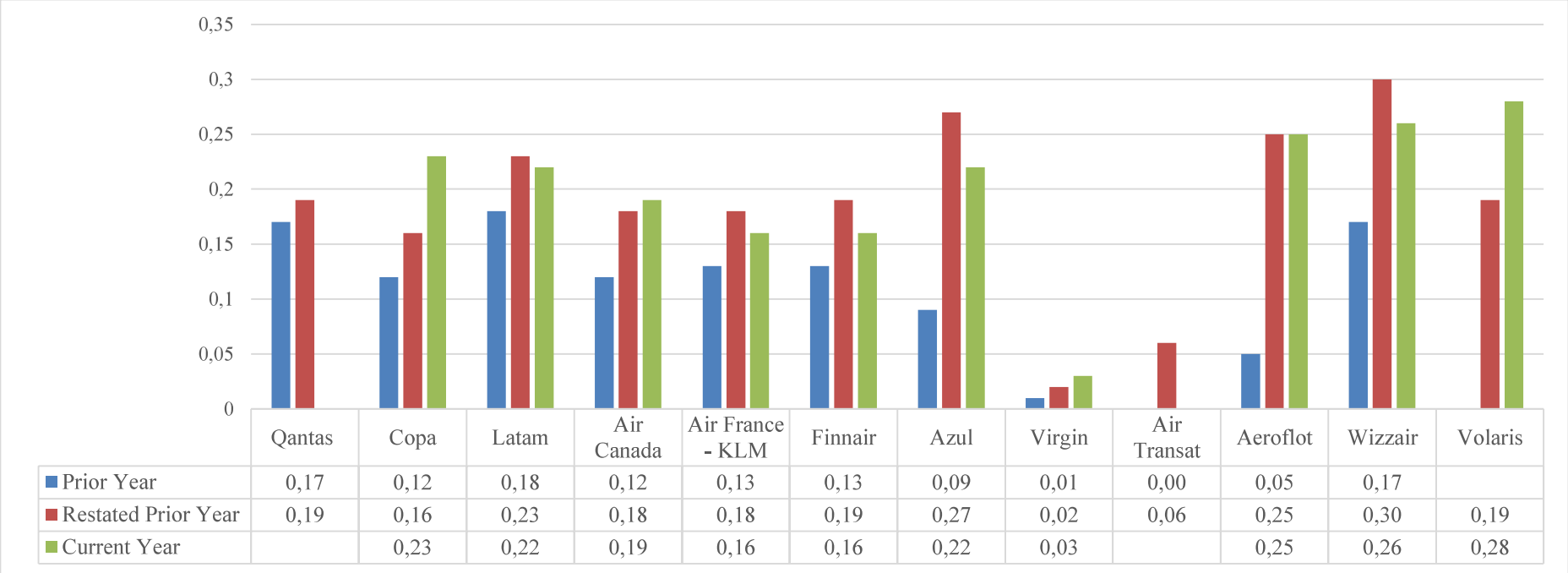
This hypothesis was accepted by the research findings by all airlines except Virgin Airlines. In this context, due to the negative EBIT of Air France – KLM, Air Transat and Volaris Airlines, this research does not report this ratio for the prior year, but it should be noted that this ratio increased and turned out to be a positive ratio after the restatement for these airlines as seen on Figure 27 because of the cancellation of operating lease expenses and recording of depreciation expenses.

On the other hand, EBIT of Virgin Airlines is negative for the prior year, and restated prior year and thus a negative numerator makes this ratio meaningless to declare for the case of Virgin Airlines.



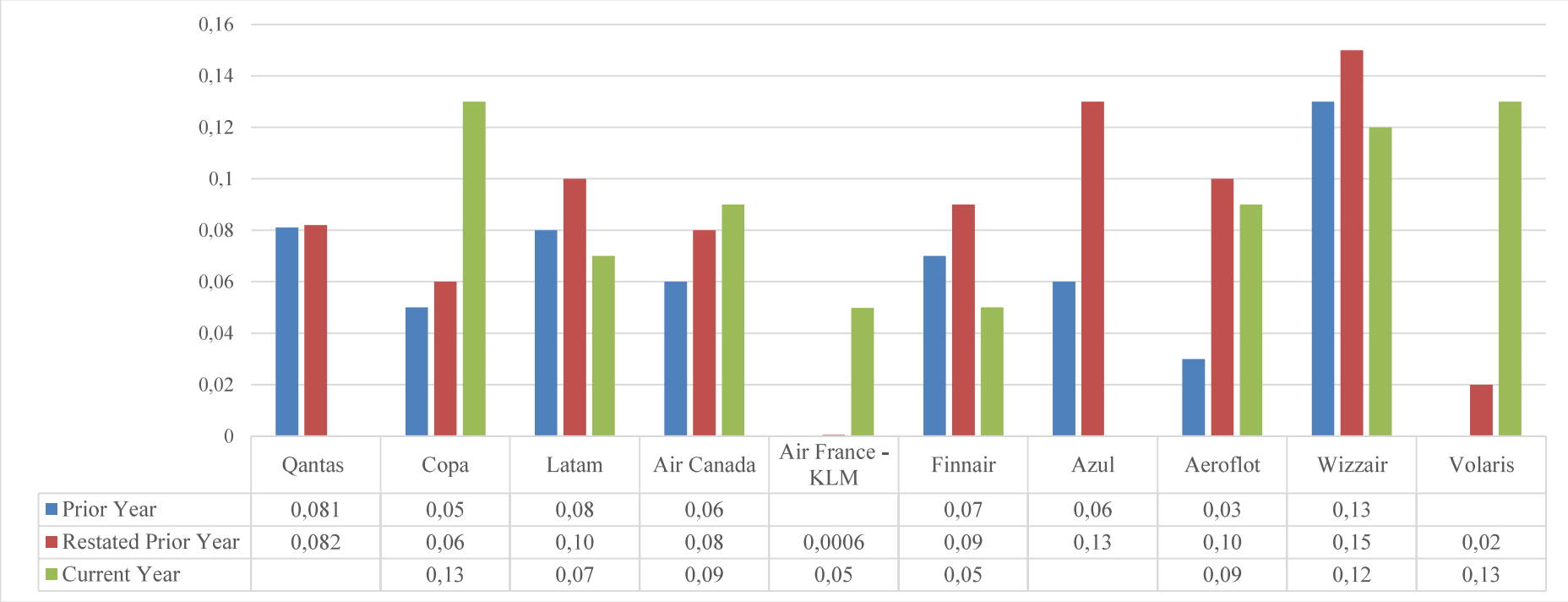

| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,93 | 0,66 | 0,56 | 0,94 | 1,06 | 0,96 | 0,78 | 1,47 | 1,85 | 1,93 | 0,91 | 1,22 |
| Restated Prior Year | 0,87 | 0,60 | 0,49 | 0,82 | 0,87 | 0,72 | 0,56 | 0,93 | 1,26 | 0,63 | 0,59 | 0,48 |
| Current Year | 0,71 | 0,62 | 0,48 | 0,69 | 0,91 | 0,80 | 0,60 | 0,90 | 0,65 | 0,73 | 0,63 | 0,55 |

**Figure 25: Asset Turnover Ratio Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Virgin | Air Transat | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,17 | 0,12 | 0,18 | 0,12 | 0,13 | 0,13 | 0,09 | 0,01 | 0,00 | 0,05 | 0,17 | |
| Restated Prior Year | 0,19 | 0,16 | 0,23 | 0,18 | 0,18 | 0,19 | 0,27 | 0,02 | 0,06 | 0,25 | 0,30 | 0,19 |
| Current Year | | 0,23 | 0,22 | 0,19 | 0,16 | 0,16 | 0,22 | 0,03 | | 0,25 | 0,26 | 0,28 |

**Figure 26: (EBITDA / Net Sales) Ratio Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Azul | Aeroflot | Wizzair | Volaris |
|---|---|---|---|---|---|---|---|---|---|---|
| Prior Year | 0,081 | 0,05 | 0,08 | 0,06 | | 0,07 | 0,06 | 0,03 | 0,13 | |
| Restated Prior Year | 0,082 | 0,06 | 0,10 | 0,08 | 0,0006 | 0,09 | 0,13 | 0,10 | 0,15 | 0,02 |
| Current Year | | 0,13 | 0,07 | 0,09 | 0,05 | 0,05 | | 0,09 | 0,12 | 0,13 |

**Figure 27: (EBIT / Net Sales) Ratio Before and After the Restatement**

d. **H15:** The increase in (Net Income / Net Sales) ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

This hypothesis was accepted by the research findings by only two airlines which are Air France – KLM and Latam Airlines as seen on Figure 28. Copa's ratio remained constant from prior year to restated prior year versus the ratio of Qantas, Air Canada, Finnair, and Wizzair decline after the restatement due to the increasing effect of depreciation and interest expenses leading to a decline on net income.

On the other hand, other airlines of Azul, Virgin, Air Transat, Aeroflot, and Volaris have negative numerator which refers to loss on the ratio. Therefore, such a situation leads to negative ratio which is not meaningful to declare.

e. **H16:** The increase in ROA ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

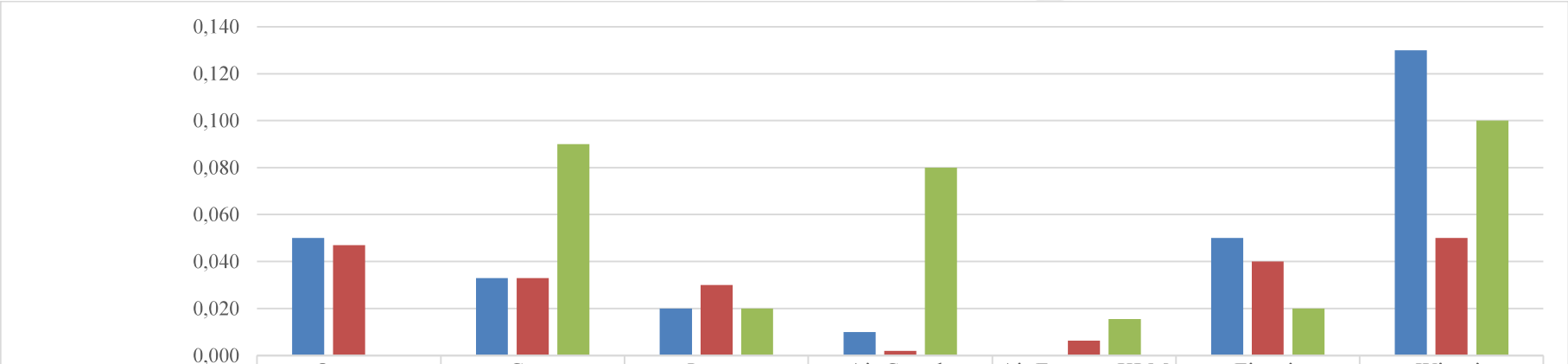
This hypothesis was accepted by the research findings by only two airlines which are Air France – KLM and Latam Airlines as seen on Figure 29. The ratio of Qantas, Copa, Air Canada, Finnair, and Wizzair decline after the restatement due to the increasing effect of depreciation and interest expenses leading to a decline on net income even though total assets increased as a reflection of right-of-use assets.

On the other hand, airlines of Azul, Virgin, Aeroflot, Air Transat and Volaris have negative numerator which refers to loss on the ratio. Therefore, such a situation leads to negative ratio which is not meaningful to declare.

f. **H17:** The increase in ROE ratio observed in the first-time adoption of IFRS 16 by Air France - KLM is valid for other airlines adopting the full-retrospective basis.

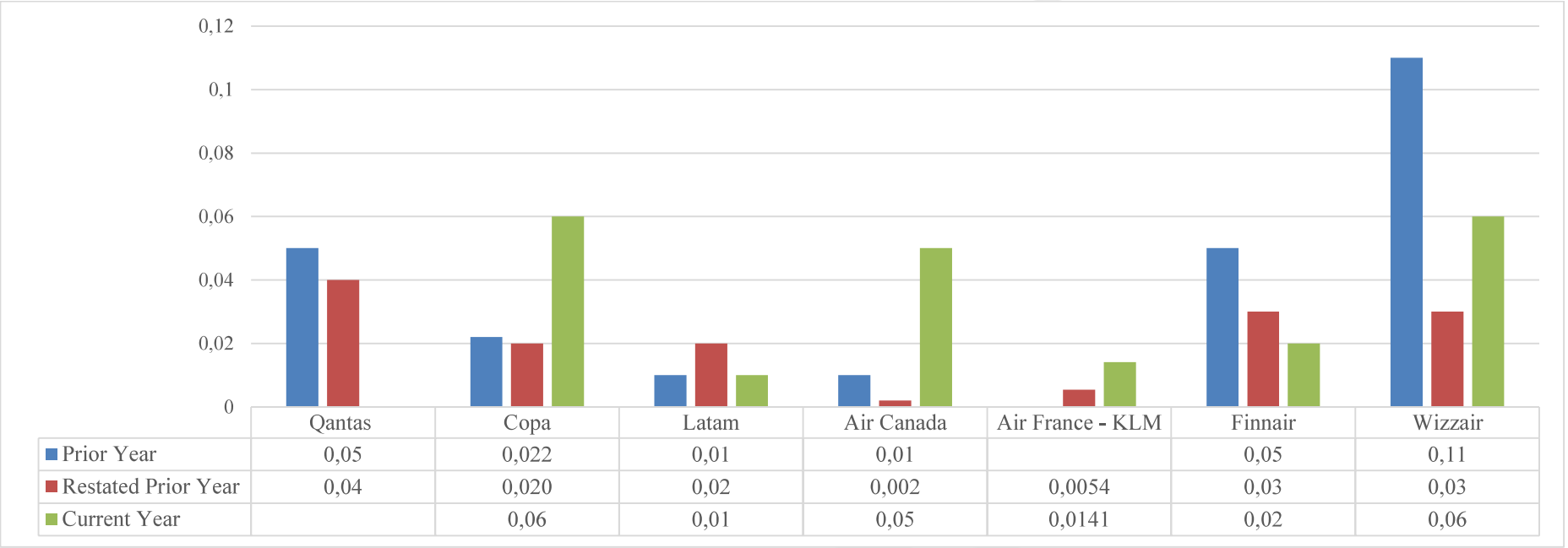
This hypothesis was accepted by only four airlines which are Qantas, Copa, Latam, and Air France – KLM as seen on Figure 30. The ratio of Air Canada, Finnair, and Wizzair declined after the restatement due to the increasing effect of depreciation and interest expense leading to a decline on net income.

On the other hand, airlines of Azul, Virgin, and Aeroflot have net loss on the numerator and negative equity on the denominator. This leads to misleading ROE. In addition, the case of negative numerator of Air Transat and Volaris is also valid as it is in the case of ROA.



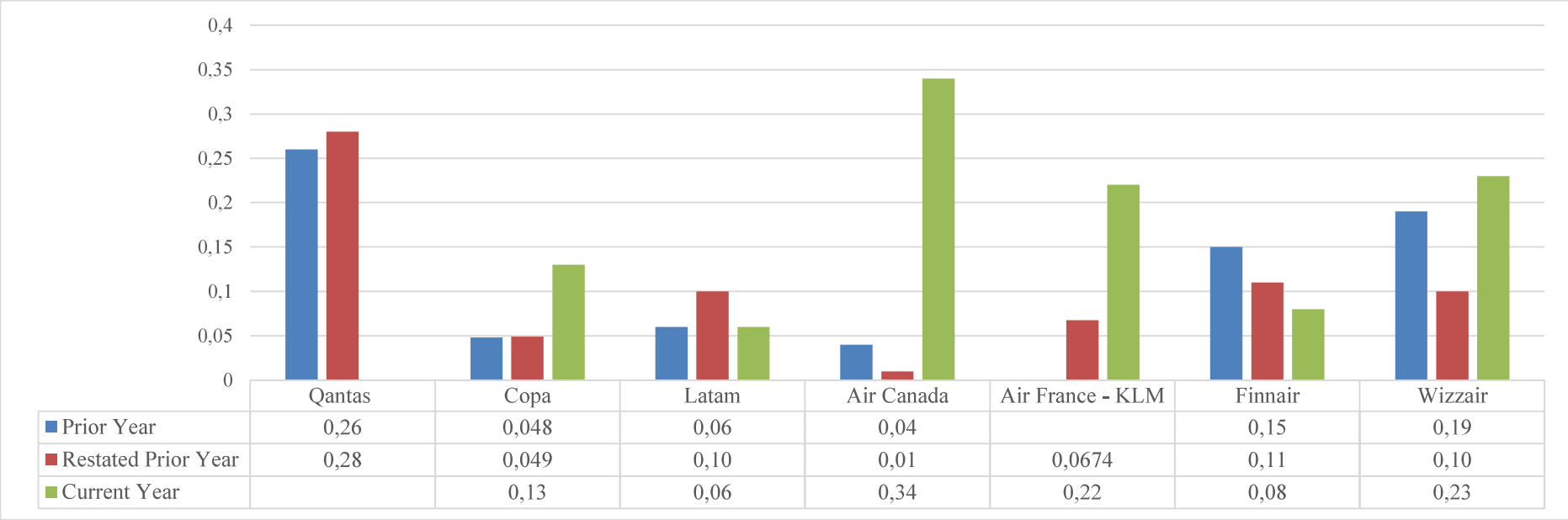

| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Wizzair |
|---|---|---|---|---|---|---|---|
| Prior Year | 0,050 | 0,033 | 0,02 | 0,01 | | 0,05 | 0,13 |
| Restated Prior Year | 0,047 | 0,033 | 0,03 | 0,002 | 0,0063 | 0,04 | 0,05 |
| Current Year | | 0,09 | 0,02 | 0,08 | 0,0155 | 0,02 | 0,10 |

**Figure 28: (Net Income / Net Sales) Ratio Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Wizzair |
|---|---|---|---|---|---|---|---|
| Prior Year | 0,05 | 0,022 | 0,01 | 0,01 | | 0,05 | 0,11 |
| Restated Prior Year | 0,04 | 0,020 | 0,02 | 0,002 | 0,0054 | 0,03 | 0,03 |
| Current Year | | 0,06 | 0,01 | 0,05 | 0,0141 | 0,02 | 0,06 |

**Figure 29: ROA Ratio Before and After the Restatement**




| | Qantas | Copa | Latam | Air Canada | Air France - KLM | Finnair | Wizzair |
|---|---|---|---|---|---|---|---|
| Prior Year | 0,26 | 0,048 | 0,06 | 0,04 | | 0,15 | 0,19 |
| Restated Prior Year | 0,28 | 0,049 | 0,10 | 0,01 | 0,0674 | 0,11 | 0,10 |
| Current Year | | 0,13 | 0,06 | 0,34 | 0,22 | 0,08 | 0,23 |

**Figure 30: ROE Ratio Before and After the Restatement**

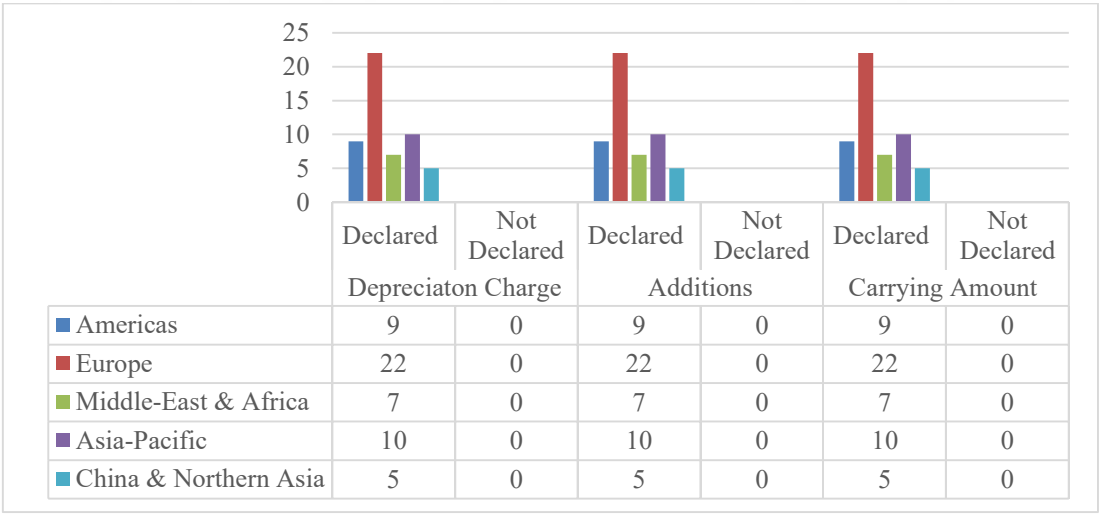
# CHAPTER 6

## FINDINGS ON LESSEE'S DISCLOSURES IN THE AIRLINE INDUSTRY

This chapter provides research findings about the lessee's disclosures in the airline industry on the first-time adoption of IFRS 16.

### 6.1 DECLARATION OF DEPRECIATION CHARGE, ADDITIONS, AND CARRYING AMOUNTS ON RIGHT-OF-USE ASSETS

At the first-time adoption of IFRS 16, research reveals that all airlines reported the value of their depreciation charge for right-of-use assets [IFRS 16.53a], additions to right-of-use assets [IFRS 16.53h], and the carrying amount of right-of-use assets at the end of the reporting period [IFRS 16.53j] as seen on Figure 31. This means that H1, H2, and H3 hold.




| | Depreciaton Charge | | Additions | | Carrying Amount | |
|---|---|---|---|---|---|---|
| | Declared | Not Declared | Declared | Not Declared | Declared | Not Declared |
| Americas | 9 | 0 | 9 | 0 | 9 | 0 |
| Europe | 22 | 0 | 22 | 0 | 22 | 0 |
| Middle-East & Africa | 7 | 0 | 7 | 0 | 7 | 0 |
| Asia-Pacific | 10 | 0 | 10 | 0 | 10 | 0 |
| China & Northern Asia | 5 | 0 | 5 | 0 | 5 | 0 |

**Figure 31: Reporting of Depreciation Charge, Additions, and Carrying Amount**

An example of how Depreciation Charge, Additions, and Carrying Amount should be reported in the notes of financial statements is provided from the annual report of Norwegian Air (2019) as seen on Table 11.

**Table 11: Example of Reporting Depreciation Charge, Additions, and Carrying Amount**

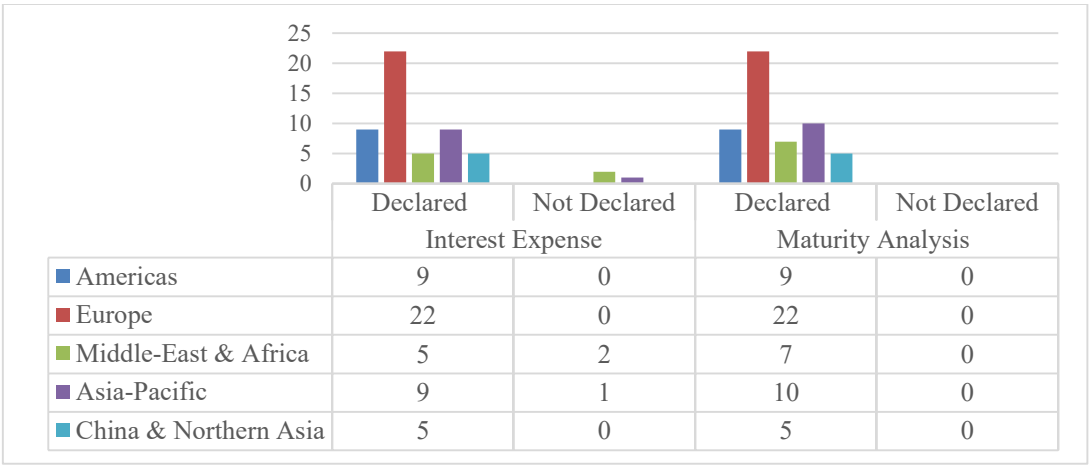
| *NOK million* | Buildings | Right-of-use buildings | Aircraft, parts and installations on leased aircraft | Right-of-use aircraft, parts and installations | Prepayment on aircraft orders | Equipment and fixtures | Right-of-use equipment | Lease | Total |
|---|---|---|---|---|---|---|---|---|---|
| Acquisition cost 1 January 2018 | 299.0 | - | 29,960.2 | - | 5,219.4 | 373.5 | - | 6.3 | 35,858.4 |
| Additions | - | - | 9,860.4 | - | 5,243.8 | 169.2 | - | - | 15,273.5 |
| Transfers | - | - | 2,489.1 | - | (2,489.1) | - | - | - | - |
| Disposals | (4.2) | - | (7,079.9) | - | - | - | - | (6.3) | (7,090.5) |
| Reclassified to Asset held for sale | - | - | (853.0) | - | - | - | - | - | (853.0) |
| Foreign currency translation | - | - | 2,353.1 | - | 587.2 | - | - | - | 2,940.3 |
| Acquisition cost 31 December 2018 | 294.8 | - | 36,729.8 | - | 8,561.3 | 542.7 | - | - | 46,128.7 |
| Acquisition cost 1 January 2019 | 294.8 | - | 36,729.8 | - | 8,561.3 | 542.7 | - | - | 46,128.7 |
| Recognition of right of use asset on initial application of IFRS 16 | - | 315.5 | - | 32,432.0 | - | - | 48.6 | - | 8.0 |
| Acquisition costs 1 January 2019 | 294.8 | 315.5 | 36,729.8 | 32,432.0 | 8,561.3 | 542.7 | 48.6 | - | 46,136.7 |
| Additions | - | 23.9 | 675.3 | 4,000.4 | 102.9 | 46.3 | 0.7 | - | 5,713.7 |
| Transfers | - | - | 758.9 | - | (758.9) | - | - | - | - |
| Disposals | - | - | (4,968.8) | - | (3,047.0) | (3.3) | - | (6.3) | (8,025.4) |
| Reclassified to Asset held for sale | - | - | (163.1) | - | - | - | - | - | (163.1) |
| Foreign currency translation | - | (0.8) | 716.7 | 506.0 | 28.3 | (0.9) | 1.2 | - | 1,340.4 |
| Acquisition costs 31 December 2019 | 294.8 | 337.7 | 33,748.8 | 37,831.3 | 4,946.6 | 586.9 | 50.5 | (6.3) | 77,790.3 |
| Accumulated depreciation 1 January 2018 | 19.6 | - | 4,098.4 | - | 0.0 | 283.0 | - | 6.3 | 4,407.3 |
| Depreciation | 5.8 | - | 1,555.1 | - | - | 48.3 | - | - | 1,509.2 |
| Depreciation disposals | - | - | (277.3) | - | - | - | - | (6.3) | (283.6) |
| Reclassified to Asset held for sale | - | - | (2.4) | - | - | - | - | - | (2.4) |
| Foreign currency translation | - | - | 311.9 | - | - | - | - | - | 311.9 |
| Accumulated depreciation 31 December 2018 | 25.3 | - | 5,665.6 | - | 0.0 | 331.4 | - | - | 6,022.3 |
| Accumulated amortization 1 January 2019 | 25.3 | - | 5,665.6 | - | 0.0 | 331.4 | - | - | 6,022.3 |
| Depreciation | 5.8 | 40.7 | 2,803.7 | 4,602.9 | - | 59.1 | 14.3 | - | 7,526.4 |
| Depreciation disposals | - | - | (2,230.5) | - | - | (1.8) | - | (6.3) | (2,238.5) |
| Reclassified to Asset held for sale | - | - | 0.2 | - | - | - | - | - | 0.2 |
| Foreign currency translation | - | (0.2) | 117.7 | (16.9) | - | 0.3 | 0.5 | - | 101.4 |
| Accumulated depreciation 31 December 2019 | 31.1 | 40.4 | 6,356.8 | 4,586.0 | 0.0 | 389.0 | 14.8 | (6.3) | 11,411.8 |
| Book value 31 December 2018 | 269.4 | - | 31,064.2 | - | 8,561.3 | 211.4 | - | - | 40,106.4 |
| Book value 31 December 2019 | 263.7 | 297.3 | 27,392.0 | 33,245.4 | 4,946.6 | 197.9 | 35.7 | - | 66,378.5 |

**Source: Norwegian Air (2019; 51)**

## 6.2. DECLARATION OF INTEREST EXPENSE, AND MATURITY ANALYSIS ON LEASE LIABILITIES

At the first-time adoption of IFRS 16, research reveals that 94% of airlines report their interest expense on lease liabilities [IFRS 16.53b] as seen on Figure 32. This means that H4 holds. However, they report their interest expense on lease liabilities at different disclosures, leading to a diversified structure in reporting such information. Therefore, to make sure whether this disclosure is available, annual report should be checked carefully. In such context, the users of financial information are expected to find this disclosure (a) under the disclosure of lease liabilities, or (b) under the disclosure of finance costs, or (c) under the disclosure of finance charges.

In addition to reporting of interest expense on lease liabilities, research shows that all airlines declared their maturity analysis of lease liabilities [IFRS 16.58] as seen on Figure 32. This means that H5 holds. However, as it is in the case of reporting of interest expense on lease liabilities, a diversified reporting structure has also been observed in the case of maturity analysis of lease liabilities. Therefore, to make sure whether the users of financial information can reach this disclosure, annual reports should also be checked in a detailed manner. Maturity analysis of lease liabilities are expected to be reported (a) under the disclosure of lease liabilities, or (b) under the disclosure of liquidity risk, or (c) under the disclosure of borrowings.




| | Interest Expense | | Maturity Analysis | |
|---|---|---|---|---|
| | Declared | Not Declared | Declared | Not Declared |
| Americas | 9 | 0 | 9 | 0 |
| Europe | 22 | 0 | 22 | 0 |
| Middle-East & Africa | 5 | 2 | 7 | 0 |
| Asia-Pacific | 9 | 1 | 10 | 0 |
| China & Northern Asia | 5 | 0 | 5 | 0 |

**Figure 32: Reporting of Interest Expense, and Maturity Analysis**

An example of how the maturity analysis should be reported in the notes of financial statements is provided from the annual report of IAG (2019) as seen on Table 12.

**Table 12: Reporting of Maturity Analysis**

| ***Partial maturity analysis of IAG in € million*** | | | | | | |
|---|---|---|---|---|---|---|
| | **Within 6 months** | **6-12 months** | **1-2 years** | **2-5 years** | **More than 5 years** | **Total** |
| **Interest-bearing loans and borrowings:** | | | | | | |
| *Assets financing liabilities* | (56) | (49) | (95) | (289) | (988) | (1,477) |
| *Lease liabilities* | (1,073) | (957) | (1,753) | (4,505) | (6,289) | (14,477) |
| *Fixed rate borrowings* | (20) | (31) | (46) | (1,158) | (599) | (1,854) |
| *Float rate borrowings* | (13) | (17) | (30) | (110) | (67) | (237) |

**Source: IAG (2019; 168)**

## 6.3 DECLARATION OF SHORT-TERM LEASES AND LEASES OF LOW-VALUE ASSETS

### 6.3.1 Benefiting from the Exemption of Not Capitalizing Short-term Leases and Leases of Low-value Assets

At the first-time adoption of IFRS 16, research reveals that 96% of airlines (52 airlines) benefited from exemption of not capitalizing short-term leases and leases of low value assets within the right-of-use assets. In this context, Air Arabia did not provide clear information about whether it benefited from the exemption or not.

### 6.3.2 Disclosure of Expenses Relating to Short-term Leases and Leases of Low-value Assets If the Airline Benefits from the Exemption

At the first-time adoption of IFRS 16, research reveals that 50% of airlines benefiting from exemption reported their expenses relating to short-term leases and 36% of airlines benefiting from exemption reported their expenses relating to low-value assets (a) under the disclosure of "lease liabilities" or (b) under the disclosure of "other operating and administrative expenses" as seen on Figure 33 but it is not evident by the majority of airlines where such expenses are reflected in within which account on the income statement.


| | Expenses Relating to Short-term Leases | | | Expenses Relating to Leases of Low-value Assets | |
|---|---|---|---|---|---|
| | Declared | Not Declared | No Short-term Lease | Declared | Not Declared |
| Americas | 5 | 4 | 0 | 4 | 5 |
| Europe | 6 | 15 | 1 | 7 | 15 |
| Middle-East & Africa | 3 | 4 | 0 | 3 | 4 |
| Asia-Pacific | 8 | 2 | 0 | 2 | 8 |
| China & Northern Asia | 4 | 1 | 0 | 3 | 2 |

**Figure 33: Expenses Relating to Short-term Leases and Leases of Low-value Assets**

In such context, 2019 annual report of Norwegian Air provides an example of what is expected from disclosure of the reporting of expenses relating to short-term leases and leases of low-value assets by focusing on the income statement accounts in the context of reflecting such expenses to "Technical maintenance expenses", and "General and administrative expenses" (Norwegian Air, 2019) as seen in Table 13.

**Table 13: Expected Presentation for the Expenses of Short-term Leases and Leases of Low-value Assets**

| *in NOK million* | Technical maintenance expenses | General and administrative expenses | Total |
|---|---|---|---|
| Expenses relating to short-term leases | 14.0 | 26.1 | 40.2 |
| Expenses relating to low-value leases | - | 0.5 | 0.5 |
| Variable lease payments | 96.7 | 35.4 | 132.1 |
| Total | 110.7 | 62.1 | 172.8 |

**Source: Norwegian Air (2019; 53)**

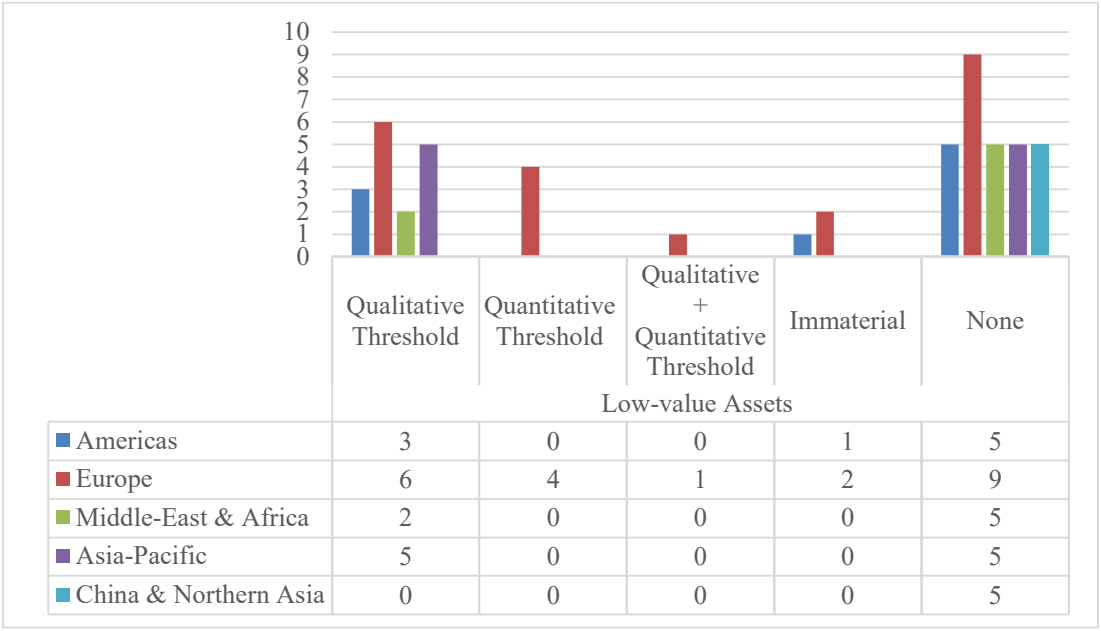
On the other hand, for the remaining airlines, it is not clear whether these airlines have short-term leases and leases of low-value assets even though they declared that they benefited from exemption except for Wizzair of the Europe because it explicitly declared that it does not have any short-term leases. Therefore, not reporting expenses relating to short-term leases and leases of low-value assets even if these airlines own such leases lead to lack of information and non-compliance. The

prepares of financial information provide misleading information as if there is no short-term lease and lease of low-value assets in these airlines. Due to the complicated reporting, this research assumes that H6 and H7 do not hold.

In addition, most airlines reported their such expenses separately, but some airlines preferred reporting of such expenses in total titled as "expenses relating to leases of low-value assets and short-term leases". Declaration of such expenses in total leads to disparity in reporting among airlines.

### 6.3.3 Threshold for Lease of Low-value Assets

The concept of "low-value" is a judgmental terminology mentioned in IFRS 16. IFRS 16 provides guidance on its Appendix B (IASB, 2018). In this context, it should be noted that some airlines define their framework of low-value asset in their annual reports. This is based on a qualitative threshold, quantitative threshold, or "a judgmental wording such as immaterial". In this context, 30% of airlines prefer qualitative threshold. 8% of airlines prefer quantitative threshold. 6% of airlines prefer the word "immaterial". 55% of airlines do not report any threshold for the purpose of providing clear understanding of what the low-value assets purports to represent as seen on Figure 34 and 1 airline prefers both qualitative and quantitative thresholds.




| | Qualitative Threshold | Quantitative Threshold | Qualitative + Quantitative Threshold | Immaterial | None |
|---|---|---|---|---|---|
| | Low-value Assets | | | | |
| Americas | 3 | 0 | 0 | 1 | 5 |
| Europe | 6 | 4 | 1 | 2 | 9 |
| Middle-East & Africa | 2 | 0 | 0 | 0 | 5 |
| Asia-Pacific | 5 | 0 | 0 | 0 | 5 |
| China & Northern Asia | 0 | 0 | 0 | 0 | 5 |

**Figure 34: Thresholds of Leases of Low-value Assets**

In terms of qualitative threshold, airlines define their low-value assets as tablets, personal computers, telephones, office equipment, printing and photocopy machines, small items of office furniture, office vehicle, airport apron licenses, ground service equipment, and accommodation equipment.

In terms of quantitative threshold, 4 airlines of the Europe declare such metric for low-value assets: (a) AF-KLM's, and SAS's low-value refers to below $ 5.000, (b) Wizzair's low-value refers to below € 5.000, (c) Virgin Atlantic's low-value refers to equal to or less than US $5.000.

In addition, Aeroflot's low-value refers to IT equipment and small items of office furniture up to US $5.000 or RUB 300 thousand combining qualitative and quantitative thresholds.

On the other hand, a limited number of airlines calls their low-value assets as they are immaterial. Immaterial is a judgmental term compared to qualitative and quantitative thresholds. Therefore, low-value assets can be clarified though the word "immaterial" if it is supported by the materiality concept of the IFRS Conceptual Framework as declared by the 2019 annual report of Finnair (Finnair, 2019) as seen on Table 14.

**Table 14: Example of Defining Leases of Low-value Assets as Immaterial**

| |
|---|
| Finnair uses the exemption provided by the standard not to account for lease liability for operating leases which have a term of 12 months or less, and which do not include an option to purchase the underlying asset. In addition, Finnair does not account for IFRS 16 lease liability for leases for which the underlying asset is not material to Finnair. The assessment of whether the underlying asset is material and is within the scope or excluded from the recognition requirements of IFRS 16 is based on the concept of materiality in the Conceptual Framework and IAS 1. Finnair recognizes the lease payments associated with such short-term and immaterial leases as an expense on a straight-line basis. |

**Source: Finnair (2019; 50)**

## 6.4 DECLARATION OF TOTAL CASH OUTFLOW FOR LEASES

At the first-time adoption of IFRS 16, research reveals that 96% of airlines report their total cash outflows for leases. This means that H8 holds. However, there is a diversified structure in reporting of such cash outflows. Therefore, the users of financial information are expected to find this information (a) directly on the statement of cash flows within the account of "payments of lease liabilities" in the financing section of this statement, or (b) directly on the statement of statement of cash flows but "interest paid on lease liabilities" reported in the operating or financing section and "payment of principal amount of lease liabilities" reported in the financing section, or (c) under the disclosure of lease liabilities by referring to "total cash outflows for leases", or (d) under the disclosure of "total cash outflows for leases" by reporting leased based cash outflows from operating, investing, and financing sections of this statement.

Examples indicating the diversity of reporting cash outflows related to lease liabilities are provided below from the annual reports of Aeroflot Airlines, IAG, and Cathey Pacific Airlines as seen on Table 15, Table 16, and Table 17.

**Table 15: Example of Reporting Payment of Lease Liabilities for (a) and (b)**

| *Partial Statement of Cash Flows of Aeroflot Airlines for the year ended 31 December 2019 in millions of RUB* | **2019** | **2018** |
|---|---|---|
| Receipt of loans and borrowings | 36,161 | 350 |
| Repayment of loans and borrowings | (23,674) | (131) |
| Repayment of the lease liabilities principal | (78,694) | (73,795) |
| *Interest paid except for interest under lease contracts* | (407) | (253) |
| *Interest paid under lease contracts* | (45,486) | (43,775) |
| Dividend paid | (3,286) | (14,543) |
| Purchase of treasury shares | - | (7,040) |
| ***Net cash used in financing activities*** | **(115,486)** | **(139,187)** |

**Source: Aeroflot (2019; 5)**

**Table 16: Example of Reporting "Total Cash Outflows for Leases" for (c)**

| ***Amounts recognised in the Consolidated cash flow statement*** |
|---|
| The Group had total cash outflows for leases of €2,057 million in 2019. |

**Source: IAG (2019; 156)**

**Table 17: Example of Reporting "Total Cash Outflows for Leases" for (d)**

| Cash outflows for leases included in the cash flows statement in HK$M include: | | |
|---|---|---|
| | **2019** | **2018** |
| Within operating cash flows | 990 | 5,872 |
| Within investing cash flows | 2 | 2 |
| Within financing cash flows | 7,469 | 3,669 |
| | 8,461 | 9,543 |

**Source: Cathey Pacific Airlines (2019; 68)**

# CONCLUSION

This thesis focuses on some observations related to the global airline industry regarding (1) the presentation of leased (right-of-use) assets, and lease liabilities on the statement of financial position considering the two allowable accounting treatments under IFRS 16, (2) how financial ratios are affected from prior year to restated prior year when airlines adopt IFRS 16 on a full-retrospective basis, and (3) how the compliance level of the lessee's disclosures is on the first-time adoption of IFRS 16.

In terms of presentation of right-of-use assets and lease liabilities, this research pointed out that 66% of the airlines report their such assets on the face of the statement of financial position versus 77% of the airlines declare their lease liabilities on the face of the statement of financial position. In order to observe the magnitude or size of right-of-use assets and lease liabilities, lease oriented industries as it is in the case of the airline industry should prefer the presentation of such assets and liabilities as a separate line time to clearly report such values on the statement of financial position for the purpose of reporting for the benefit of the users of financial information.

In terms of adoption of IFRS 16 on a full-retrospective basis, this research reveals the following results regarding the change in the financial ratios of the airlines from prior year to restated prior. Out of 22 ratios, the direction of 15 ratios within the framework of the 12 airlines adopting the full-retrospective basis is expected to be the same for other airlines which are not part of this research versus the direction of the remaining 7 ratios should be analyzed on a case-by-case basis considering the case of "*depends*" as seen on Table 18 considering adjusted depreciation expense, and adjusted interest expense in the context of characteristics of lease composition (also called lease portfolio) (Sacarin, 2017). In addition, negative CFO, negative EBIT, negative EBITDA, loss rather than profit (net income) on the numerator and negative equity on the denominator of some financial ratios consisted of the limitations of this research.

**Table 18: Change in Financial Ratios After the Adoption of IFRS 16**

| | **Global Airlines on a Full-Retrospective Basis** |
|---|---|
| **Change in Assets & Liabilities** | |
| Change in Total Assets | Increase |
| Change in Non-Current Assets | Increase |
| Change in Total Liabilities | Increase |
| Change in Current Liabilities | Increase |
| Change in Non-Current Liabilities | Increase |
| **Liquidity Ratios** | |
| Net Working Capital | Decrease |
| Current Ratio | Decrease |
| CFO / Average Current Liabilities | Increase |
| **Solvency Ratios** | |
| Total Liabilities / Equity | Increase |
| Total Current Liabilities / Equity | Increase |
| Total Non-Current Liabilities / Equity | Increase |
| Total Liabilities / Total Assets | Increase |
| CFO / Average Non-Current Liabilities | Depends |
| CFO / Average Total Liabilities | Depends |
| EBITDA / Interest Expense | Depends |
| (CFO + Interest Paid) / Interest Paid | Depends |
| **Profitability Ratios** | |
| Asset Turnover Ratio | Decrease |
| EBITDA / Net Sales | Increase |
| EBIT / Net Sales | Increase |
| Net Income / Net Sales | Depends |
| ROA | Depends |
| ROE | Depends |

In terms of lessee's disclosures, research reveals that depreciation charge, additions, carrying amounts on right-of-use assets, interest expense and maturity analysis on lease liabilities were declared by most airlines. The main problem of the lessee disclosures is based on the reporting of expenses of leases on low-value assets and short-term leases if the airline benefits from the exemption of not capitalization leases on low-value assets and short-term leases. Declaration of such expenses related to such leases should be clarified through imitating effect within the airline industry for the purpose of providing complete and understandable information starting from the second year of IFRS 16's adoption. In this context, which expense account or accounts

will reflect the effect of such lease expenses should also be clarified. Also, expenses relating to short-term leases and leases of low-value assets should be separately reported.

In addition, the reporting on where "total cash flows on leases", "interest expense on lease liabilities", "expenses related to short-term leases", "expenses related to leases on low-value assets" is declared, is diversified. The standard proposes the tabular format reporting (IFRS 16.54) but preparers of financial information in the airline industry prefers providing some of lessee's disclosures at different sections of the annual report at the first-time adoption of IFRS 16. This makes difficult following up the interrelated disclosures. Therefore, it is expected that all lessee's related disclosures should be provided under the headings of "right-of-use assets" and "lease liabilities" in a tabular format.

Further research would be to analyze such presentational and disclosure issues for IFRS 16's second year of adoption to observe whether there are any improvements in such contexts in the global airline industry.

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