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REFLECTIONS OF TFRS 16 LEASES STANDARD ON FINANCIAL STATEMENTS: APPLICATIONS ON AIRLINE COMPANIES[1]

TFRS 16 Kiralamalar Standardının Finansal Tablolara Yansımaları: Havayolu Şirketlerinde Uygulamalar

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ABSTRACT
This study aims to identify reflections of Turkish Financial Report 16 Leases Standard (TFRS 16) on financial statements of two airlines companies. In other words, it was tried to identify changes resulting from TFRS 16 in the study. In the study, quantitative and qualitative analysis methods were used. While quantitative method is ratio analysis, qualitative method is document analysis. To perform the ratio analysis, various assumptions were used. For example, it was assumed floating interest rate was out of the question for lease payments. To perform the analyses, information was obtained from company financial reports. Prior to performing the ratio analysis, the balance sheets and comprehensive income statements of two prominent airlines in Turkey for the year 2017. Specifically, it focused on converting off-balance sheet liabilities associated with operational leases into capitalised amounts. The results of the analyses indicate that various changes have occurred due to TFRS 16. Based on the TFRS 16, the revised balance sheets show no change in current assets. It is concluded that there is a growth in non-current assets, short-term liabilities and long-term liabilities, but a decrease in shareholders' equity. There has been a decline in the cost of sales. This was found to lead to an increase in gross profit.

Anahtar Kelimeler
Lease, TFRS 16, TAS 17

ÖZ
Bu çalışmanın amacı, Türkiye Finansal Raporlama Standardı 16 Kiralamalar'ın (TFRS 16) iki havayolu şirketinin finansal tablolarına yansımalarını tespit etmektir. Diğer bir ifadeyle çalışmada TFRS 16'dan kaynaklanan değişiklikler tespit edilmeye çalışılmıştır. Çalışmada nicel ve nitel analiz yöntemleri kullanılmıştır. Nicel yöntem oran analizi iken nitel yöntem doküman analizidir. Oran analizini gerçekleştirmek için çeşitli varsayımlar kullanılmıştır. Örneğin, kira ödemeleri için değişken faiz oranının söz konusu olmadığı varsayılmıştır. Analizleri gerçekleştirmek için şirket finansal raporlarından bilgi alınmıştır. Oran analizi yapılmadan önce, Türkiye'nin önde gelen iki havayolu şirketinin 2017 yılına ait bilançoları ve kapsamlı gelir tabloları incelenmiştir. Özellikle, operasyonel kiralamalarla ilişkili bilanço dışı yükümlülüklerin aktifleştirilen tutarlara dönüştürülmesine odaklanılmıştır. Analiz sonuçları, TFRS 16 ile birlikte çeşitli değişikliklerin meydana geldiğini göstermektedir. TFRS 16'ya göre revize edilen bilançolarda dönen varlıklarda herhangi bir değişiklik olmamıştır. Duran varlıklar, kısa vadeli yükümlülükler ve uzun vadeli yükümlülüklerin hepsinde bir büyüme olduğu bununla birlikte özkaynaklarda azalma olduğu sonucuna ulaşılmıştır. Satışların maliyetinde bir düşüş olmuştur. Bu durumun brüt kârda artışa neden saptanmıştır.

Keywords
Kiralama, TFRS 16, TMS 17

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1. Introduction

Leasing is often used for financing. In many sectors, notably aviation and retail, businesses can save money by reducing cash outflows as payments are spread over time. However, when this process is used over a period of time, the underlying assets used are often state-of-the-par. From these perspectives, leasing is very important for businesses.

The purpose of the study is to identify and examine the effects of the capitalization innovation introduced by the TFRS 16 Leases Standard on the operating lease from the lessee's perspective on the statements of financial position and statements of profit or loss and other comprehensive income of two (2) airlines and then present the results obtained with explicit comments.

Quantitative (ratio analysis) and qualitative analysis (document analysis) methods were used in the study. Through document analysis, necessary information was obtained from the audited financial reports of the relevant companies on the relevant date. Financial analysis was then performed based on this information. Non-cancelable liabilities formed the basis of the financial analysis. Various values were calculated based on non-cancellable liabilities and the impact of TFRS 16 Standard on financial statements was analyzed.

There are many studies in the literature that examine the TFRS 16 Standard and analyze the effects of this standard on financial statements. However, it can be said that Akdogan (2019), Sarı and Gungor (2019) and Ozben (2021) are the studies that focus on the impact of the standard on financial statements. This study, like the aforementioned studies, focuses on the impact of TFRS 16 on financial statements.

In this study, the impact of TFRS 16 Standard on financial statements was analyzed and it was found that there was an increase in the net book value of fixed assets and a decrease in the ratio of equity to liabilities, while the short and long-term liabilities of enterprises increased.

This study contributes to the literature by identifying the innovations brought by TFRS 16 in the most accurate way with realistic assumptions.

To define the concept of leasing, a lease agreement is a contract to lease an asset in exchange for a payment for a specified period of time and also gives the right to control how the asset is used (Çelik and Alagöz, 2022: 112).

The main thought of the lease is that the utilization is economic. Moreover, the lease is a contract that the right of use of relevant asset is transferred to the lessee. As for the right of use, it is available throughout the term in the contract (Aslan, 2018:56).

To address lease types, the underlying asset is leased by the lessee on condition that the lease term is shorter than the useful life. At this point, it can be said that operating lease is between 3-5 years. The lessor is generally responsible for maintenance and insurance. The basic difference between operating lease and financial lease is that all rights, rewards and risks don't be transferred to the lessee in operating lease. In other words, an operating lease is a lease contract in which the lessee has the right to use an asset for a period of time (temporarily) (Çelik and Alagöz, 2022: 110).

Some features of operating leases (Antepli and Karaer, 2021: 3421-3422):

- Expenses stem from all maintenance and repairs and associated with the asset that is the subject of the lease is assumed by the lessor.
- Aside from that the lessee has unilateral cancellation in a contractually specified condition, on condition that this circumstance arises, the asset that is the subject of the lease must be returned. However, as a result of the unilateral cancellation, it is compulsory that the lessee is obliged to pay the cancellation fee.

Following the general discussion on leasing, the next topic will be discussed within the scope of TAS 17 Standard. Information about the purpose and scope of this standard is given below.

1.1. The Objective and Scope of Turkish Accounting Standard (TAS) 17 and Subsequent Measurements of Financial Lease For The Lessee

The objective of the TAS 17 is to prescribe the accounting policies applied and disclosure presented by both lessor and lessee in relation to leases (TAS 17: par. 1).

The Standard is applied for the recognising for all leases except for the following:

- Leases associated with resources such as natural gas, oil, mineral that it is impossible to be re-generative,

- License agreements associated with products and rights such as copyrights, patents, plays, videocassettes, motion picture films.

General Information About TAS 17

The degree to which the rewards and risks related to the ownership of the asset that is the subject of the lease belong to the lessee or lessor is the determinant of the classifying leases within the scope of TAS 17. Transferring of the all rewards and risks stem from the ownership of the asset that is the subject of the lease is defined as financial lease in the standard. All leases other than this definition are operating leases (Şeker and Çemberlitaş, 2018: 46).

At the commencement of the lease term, the financial leasing is recognised as assets and liabilities based on the lower of the present value of the minimum lease payments or fair value. Calculating the present value of the minimum lease payments is used the discount rate. If the discount rate can be determined, it is the implicit interest rate, if cannot be determined, it is the lessee's incremental borrowing rate. Initial direct costs are transferred to the balance sheet, in other words, it is added to the amount recognised as an asset (TAS 17: par. 20).

The lessee may not legally obtain ownership of the asset that is the subject of the lease according to the legal form of the contract. However, if the transaction is a financial lease, the economic reality and substance of the transaction is that the lessee receives the economic benefits arising from the use of the asset that is the subject of the lease for substantially all of its useful economic life in exchange for a debt obligation that approximates the fair value of the leased asset at the inception of the lease and other financial liabilities associated with it (TAS 17: par. 21).

If such lease transactions are not presented the lessee's balance sheet, the level of obligations and the economic resources are understated. This circumstance pose to a trouble in terms of financial ratios. That's why it is appropriate that financial lease transactions are presented in the lessee's balance sheet as both asset and future lease payments. At the commencement of the lease term, excluding any initial direct costs that must be capitalised, the asset that is the subject of the lease ve future lease payments are recognised as assets and liabilities in equal amounts (TAS 17: par. 22).

In general, initial direct costs are incurred in relation to certain leasing activities, such as securing and negotiating lease-related agreements. For the lessee, activities costs that are directly associated with the a finance lease are added to the amount that is recognised as an asset (TAS 17: par. 24).

As a result, initial recognition in TAS 17, at the commencement of the lease term, the financial leasing is recognised as assets and liabilities based on the lower of the present value of the minimum lease payments or fair value. All initial direct costs are added to the amount that is recognised as an asset. In general, initial direct costs are incurred in relation to certain leasing activities, such as securing and negotiating lease-related agreements. For the lessee, activities costs that are directly associated with the a finance lease are added to the amount that is recognised as an asset. The determination of whether a finance lease is accounted for as a lease or a purchase is made at the commencement of the lease term (Gönen and Akça, 2014: 77).

Minimum lease payments consist of two parts. While one of these minimum lease payments is a reduction in liabilities, the other is a reduction in financial expenses. Finance expenses are calculated for each period during the lease term. This calculating is performed by using a fixed interest rate on the remaining balance of the liability. As for contingent rents, they are taken into account as an expense for each period (TAS 17: par. 25).

In addition, here are the assets that cannot be used in measurement for the Standard (Gökgöz, 2013: 110-111):

- Real estate properties for investment purpose owned by the lessees
- Real estate properties for investment purpose leased within the scope of operating lease by the lessor
- Biological assets owned by the lessees within the scope of financial leasing

Biological assets leased within the scope of operating lease by the lessor

Depreciation charge for the asset that is the subject of the financial lease should be computed in accordance with TAS 16 Property, Plant and Equipment and TAS 38 Intangible Assets. The period that is used for computing the depreciation charge depends on the transfer of the leased asset. If there is no any certainty for the transfer at the end of the period, the period is the shorter of the lease term and useful life (TAS 17: par. 27).

TAS 36 Impairment of Assets is applied to determine whether the lease asset is impaired (TAS 17: par. 30).

1.2. The Objective and The Scope of Turkish Financial Reporting Standard (TFRS) 16 Leases and Expected Impact of TFRS 16 on Financial Statements

The objective of this standard is to provide faithfully lease information for the lessee and the lessor. The information provided in this standard is the basis for evaluating how the leases affect the financial performance and cash flow of businesses (TFRS 16: par. 1).

TFRS 16 applies to all leases, including right of use leases within the scope of subleases, except the following (Ozben, 2021: 55):

a) Leases associated with resources such as natural gas, oil, mineral that it is impossible to be re-generative,
b) Leases associated with biological assets owned by the lessee and within the scope of TAS 41 Agriculture,
c) Service concession arrangements within the scope of IFRIC (International Financial Reporting Interpretations Committee) 12 Service Concession Arrangements,
d) Intellectual property licenses granted by the lessor within the scope of TFRS 15 Revenue from Customer Contracts and
e) Within the scope of TAS 38 Intangible Assets, license agreements associated with products and rights such as copyrights, patents, plays, videocassettes, motion picture films.

It was stated in article e that within the scope of TAS 38 Intangible Assets, license agreements associated with products and rights such as copyrights, patents, plays, videocassettes, motion picture films. However, The lessee can apply a lease for intangible assets, except those stated (Ozben, 2021: 56).

The expected changes in the lessee's financial statements are as follows (Hazır, 2019: 58):

- The right-of-use asset and amount of the right-of-use asset is reflected in the balance sheet. Furthermore, the present value of the lease payments is calculated for the initial measurement.
- A depreciation is calculated on the amount of the right-of-use asset.
- Depreciation and interest expense are reflected in the profit-and-loss statement.
- The principal portion of the lease liability is reflected in the cash flow statement as cash flows from financing activities.

All of the innovations in this section apply to the lessee.

Lease type classification has been removed in TFRS 16. According to TFRS 16, the lease is reflected in the balance sheet as a leased asset and lease liability under the name of a right-of-use asset (Joubert vd., 2017: 2). The IASB explains the potential changes that IFRS 16 could bring, including an increase in assets and liabilities, a reduction in the equity, an increase in Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA), an increase in operating profit and financial expenses, and a minor but bilateral change in profit before tax (EBIT) or loss (Ergün and Türel; 2022: 140).

The lessee's balance sheet's total liabilities will grow, while the percentage of equity in liabilities will fall. When the balance sheet changes in this way, asset turnover rate will fall. Financial leverage will increase as a result, and the current ratio will fall. TFRS 16'ya göre, lease transactions'in periodic interest expenses will vary according to the lease term and discount rate. These expenses will be high at the beginning of the lease term but will decrease over the years. Furthermore, due to the fact that interest expenses and depreciation expenses will be reported separately, EBITDA and EBIT will increase. As a result, the profitability ratios related to operating profit will also rise. Nonetheless, it is impossible to predict with certainty how the return on equity and return on assets will shift because the shift in net profit for the period is dependent on several factors and the leasing transaction portfolio is unpredictable (Hazır, 2019: 58–59).

The primary anticipated impact of the new standard on the balance sheet is the augmentation of assets and liabilities, along with the reduction of equity. During the initial stages of the lease agreement, the finance expenses are relatively larger and the principal payments are relatively lower in the lease instalments that need to be paid. Thus, while the lease payment drops significantly in the initial stages of the lease term compared to later stages, there will be no corresponding variation in the calculated depreciation expense. As a result, it is anticipated that the book values of the assets being leased will decline more rapidly than the lease liabilities during the initial stages of the lease term. Furthermore, the IASB anticipates the following modifications to the profit or loss and other comprehensive statement: a rise in EBITDA, an increase in both operational and financing costs, and a fluctuation in profit and loss before tax, but not substantial. Furthermore, the implementation of the new standard will result in a favourable effect on EBIT, as interest expenditures will be included in the calculation of finance costs. The anticipated impact of the new standard on the statement of cash flows is a rise in cash flows from operating operations, a decline in cash flows from financing activities, and no alteration in the overall cash flows (Ergün, 2021: 98-102).

1.3. Initial Accounting of The Lease from The Lessee's Perspective, Subsequent Measurement of The Right of Use Asset and Subsequent Measurement of The Lease Liability

This section focuses on the first recognition of a lease, specifically in relation to the right-of-use asset and the lease liability.

According to TFRS 16, Paragraph 23, the person who is leasing the asset values it based on its original cost at the beginning of the lease.

The cost of a right-of-use asset comprises the factors listed below (TFRS 16, par. 23):

a) The initial measurement value of the lease liability,
b) The amount obtained by subtracting all lease incentives received from all lease installments paid on or before the lease commencement date,
c) All initial direct costs incurred by the lessee and
d) The estimated costs that the lessee will incur in relation to the dismantling and removal of the underlying asset, the restoration of the site where it will be located or the restoration of the underlying asset to bring it into conformity with the conditions in the contract (except where such costs are incurred in relation to the production of inventory). The lessee recognises a liability for these costs at the commencement of the lease or when the lessee uses the underlying asset within a specified period of time.

When a person who is leasing incurs a responsibility for the expenses mentioned in point d above, they acknowledge those expenses as part of the leased asset in their financial records. When the person who is leasing the asset utilizes it to create goods that will be sold, they follow the guidelines of TAS 2 Inventories to record the expenses for that specific time period. The liabilities associated with these expenditures are presented by applying TAS 37 Provisions, Contingent Liabilities and Contingent Assets, as required by TFRS 16 or TAS 2 (TFRS 16, par. 25).

Following the commencement date, the lessee evaluates the value of the right-of-use asset based on its cost, unless the lessee chooses to utilize one of the measurement methodologies outlined in Paragraphs 34 and 35, which will be addressed at a later point (IFRS 16, par. 29).

When determining the cost, the lessee calculates the value of the right-of-use asset using the factors specified in TFRS 16, Paragraph 30. These factors are as follows:

1) The total amount of depreciation and impairment losses decreased.
2) The adjusted cost was determined by recalculating the lease liability according to the guidelines outlined in Paragraph 36(c).

The lessee applies depreciation to the right-of-use asset, which is the asset being leased, following the guidelines stated in Paragraph 32. However, the lessee does not follow the guidelines outlined in IAS 16 Property, Plant and Equipment (IFRS 16, par. 31).

If the lease agreement stipulates that the lessee will become the owner of the leased asset at the end of the lease term, or if the cost of the leased asset suggests that the lessee will choose to purchase it, the lessee will depreciate the leased asset from the start of the lease until the end of its useful life. Alternatively, the lessee reduces the value of the asset from the start of the lease until either the end of the lease period or the asset's useful life, whichever is shorter (IFRS 16: par. 32).

The lessee use TAS 36 Impairment of Assets to assess if there is any impairment of the leased asset and to record the corresponding impairment loss (TFRS 16, par. 33).

Having provided information on initial recognition of a lease from the lessee's perspective and subsequent measurement of the right-of-use asset, it will be now discussed the initial measurement of the lease liability.

Upon the start of the lease, the lessee calculates the lease debt by determining the present value of the remaining lease payments. The lease payments are reduced by the interest rate inherent in the lease, provided that this rate can be easily calculated. If the rate cannot be easily determined, the lessee performs the necessary computations using an alternative interest rate (TFRS 16, par. 26).

At the commencement date, lease payments included in the measurement of the lease liability consist of the following payments for the right to use the underlying asset during the lease term that are not paid at the commencement date (TFRS 16: par. 27):

a) The amount determined by subtracting all lease incentive receivables from fixed payments,
b) Lease payments that vary based on an index or rate, which are initially measured at the start of the lease using an index or rate,
c) Payments that the lessee is obligated to make for residual value commitments,
d) The price of the option if there is a reasonable level of certainty that the lessee will exercise it, and
e) Payments imposed as penalties for terminating the lease if the lease term includes an option for the lessee to terminate.

The variable lease instalments payable are determined by an index or rate mentioned in item b above. These instalments may include payments based on the Consumer Price Index (CPI), a benchmark interest rate like the London Inter Bank Offered Rate (LIBOR), or payments that adjust to changes in market rental rates (IFRS 16: par. 28).

After the lease begins, the lessee uses the rules outlined in Paragraphs 40-43 to adjust the lease liability and account for any changes in the lease payments. The lessee acknowledges that the remeasured lease liability is considered an adjustment to the leased asset. Nevertheless, if the value of the asset is decreased to zero and there is an additional decrease in the calculated lease liability, the lessee acknowledges the remaining discrepancy (known as the remeasurement amount) in their financial statement as either profit or loss (according to TFRS 16, Paragraph 39).

For the lessee to recalculate the amended lease installments by applying a new discount rate, one of the following conditions must be met (TFRS 16: par. 40):

1) A modification in the duration of the lease as outlined in Paragraphs 20-21 of this standard. The lessee calculates the adjusted lease payments based on the modified lease duration.
2) The assessment of the option to purchase the leased asset has been modified, considering the events and circumstances outlined in Paragraphs 20-21 regarding the purchase option. The lessee calculates the updated lease payments to account for the changes in the amounts owed under the purchase option.
3)

1.4. Comparison of TAS 17 and TFRS 16

The main differences between TAS 17 and TFRS 16 can be expressed as follows; in TAS 17, lease transactions were subject to the distinction between operating leases and finance leases for both the lessee and the lessor, and at the same time, operating leases were defined as transactions other than finance leases. This situation is different in TFRS 16 (Sarı and Güngör, 2020: 291-292).

To provide a comprehensive analysis, it will be now compared IAS 17 with IFRS 16 (Koç, 2022: 120).

1) In TAS 17, an operating lease is defined as "leases that are not considered finance leases". According to TFRS 16, operating leases are leases when the transfer of ownership risks and rewards of the leased asset is not significant.
2) TAS 17 classifies leases as either financing leases or operating leases based on the parties involved, namely the lessee and lessor. TFRS 16 does not make a distinction for the lessee.
3) There are significant differences between the two standards in the way the leased asset is presented in the financial statements. In TAS 17, assets and liabilities arising from operating leases were not presented in the balance sheet. As a result, the initial measurement of the asset in question did not make any sense. In TFRS 16, the lessee recognises assets and liabilities related to the leased asset on the balance sheet at the commencement date, regardless of the type of lease, using either the implied interest rate or the alternative borrowing interest rate, discounted to the present value of the leased asset.
4) In TAS 17, the leased asset was not recognised as an asset and liability on the balance sheet at the commencement of the lease. Payments made for a lease were recorded as an expense during the same period when the payment was made. The TFRS 16 standard mandates the assessment of asset and liability items associated with the leased asset in following periods, introducing innovation to this scenario. The lessee calculates the decrease in value of the asset over time and considers whether they will possess the asset when the lease ends. If the lessee will acquire ownership of the asset at the

conclusion of the lease term, they will depreciate the asset's useful life. In all other situations, the lessee will depreciate the shorter of the asset's useful life and the lease term.

5) Under IFRS 16, a lease liability is measured by the lessee in subsequent periods. In this process, interest should be measured to reflect the lease instalments paid and revaluation transactions, changes, if any, or revised in substance fixed lease instalments payable. According to the same standard, the lessee should use the implied interest rate, alternative borrowing rate or revised discount rate to determine the interest expense arising from the lease obligation.

According to TAS 17, the linked transactions were classified as period expenses. As per TFRS 16, the lessee is required to display the depreciation and interest expense of the leased asset as distinct items.

Finally, with TFRS 16, the definition of the concept of the leasing is has been changed. Substance over form concept is emphasized in this definition. What is meant by this concept is, while in TAS 17 the type of the leasing (operating lease or financial lease) is determined according to the contract provisions, in TFRS 16 it is whether the transaction is a lease or not (Baydur and Fırat, 2021: 194).

2. Method

Quantitative and qualitative analysis methods were used in the study. While quantitative method is ratio analysis, qualitative method is document analysis. To perform the analyses, information was obtained from company financial reports. Prior to performing the ratio analysis, the balance sheets and comprehensive income statements of two prominent airlines in Turkey for the year 2017. Specifically, it focused on converting off-balance sheet liabilities associated with operational leases into capitalised amounts.

2.1. The Effects of TFRS 16 on The Statement of Financial Position and Statement of Profit or Loss of Two Publicly Traded Airline Companies in Türkiye

This section of the study provides an overview of the leasing transactions of the relevant companies, using information extracted from their financial statements and independent auditor reports. Next, an analysis is conducted on the impact of TFRS 16 on the financial situation and profit/loss statements of the relevant enterprises. The results of this analysis are then reported together with accompanying remarks.

The application has been conducted on the lease transactions involving affiliated companies as lessees, specifically focusing on the financial position statements and profit or loss statements, as well as other comprehensive income statements as of December 31, 2017. The application requires some assumptions, which are clearly stated under the appropriate categories.

The companies included in the study are Pegasus Hava Taşımacılığı Anonim Şirketi and its Subsidiaries, as well as Türk Hava Yolları Anonim Ortaklığı and its Subsidiaries. In order to enhance reading efficiency, the study will use the abbreviation PHY to refer to Pegasus Hava Taşımacılığı Anonim Şirketi and its Subsidiaries, and the abbreviation THY to refer to Türk Hava Yolları Anonim Ortaklığı and its Subsidiaries.

General Information About Leasing Transactions Related to PHY and TFRS 16 Application

Due to the implementation of TFRS 16, which eliminates the off-balance sheet financing mechanism for lessees, the details regarding financial leasing transactions in PHY have been discussed only briefly.

As of December 31, 2017, PHY possesses a total of 76 aircraft in its inventory. Out of the total number of aircraft, 29 were acquired through financial leasing, 43 were acquired through operating leasing, and the company owns the remaining 4 aircraft (Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report, 2017: 6).

The Company's aircraft, both owned and leased, have a combined net book value of TL 4,091,131,616, as stated in the Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report for 2017 (pages 41-42). The proportion of this value in the whole net book value of property, plant, and equipment (TL 4,662,521,058) is roughly 0.877 (87.7%).

The mean duration of PHY's financing lease deals is 6.57 years, as stated in the Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report for the year 2017 (page 71). Operating lease agreements have a duration of 1-8 years, and the Company lacks the option to buy the leased aircraft upon the expiration of these agreements (Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report, 2017: 50). The Company's aircraft have a useful life of 23 years, as stated in the Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report of 2017 (page 43).

As per Paragraph 32 of TFRS 16, the duration of the lease (which cannot be cancelled) will be included when calculating the amount of depreciation to be assigned to aircraft under operational leases.

Typically, the quantities mentioned in the relevant declarations of PHY are denoted in Turkish Lira/s (TL), unless specified otherwise.

To implement TFRS 16, specific assumptions need to be utilized. These assumptions are outlined below:

- The mean duration of PHY's finance lease transactions is 6.57 years. According to this lease period, PHY's discount rate is around 2.69%. The rate has been approved as the discount rate to be utilized for computing the financial expense in accordance with TFRS 16.
- The average lease length for PHY's finance lease agreements is 6.57 years. Therefore, the maturity to be utilized in determining the discounted value of the liability classified as '5+' in the off-balance sheet liability is also 6.57 years. The study previously said that PHY's operating leasing agreements have durations ranging from 1 to 8 years. The classification of the obligation as '5+' instead of 8 years is due to the lack of clarity on the specific date on which the assets leased under operating leases are leased. Thus, a maturity period of 6.57 years, which is considered average, is the best choice in this context.
- The average duration of PHY's finance leasing transactions is 6.57 years, and there is no option to buy at the conclusion of the lease term as stated in the operational lease agreements. Therefore, the depreciation amount is estimated based on a length of 6.57 years.
- The chosen depreciation method is the straight-line depreciation approach.
- The calculations for the maturity classification in the 'PHY Non-Cancellable Operating Lease Liabilities' table include the liability for 0-1 year.
- Lease payments are done annually, with equal instalments for leases classified as 1-5 years.
- Lease payments are made based on a predetermined rate.
- The Tax (expense)/income item in both TAS 17 and TFRS 16 Statement of Profit or Loss and Other Comprehensive Income is valued at zero (0).
- The residual value of assets under operating leases is negligible.
- The statement of profit or loss and other comprehensive income does not include the operating lease expenses for the year 2017, which are recorded as zero TL.

Upon analysis of Table 2.1, it is observed that TL 572.402.539, representing the entire lease payments recognised as expenses for the operating lease period of PHY, is excluded from the statement of profit or loss and other comprehensive income, in accordance with the assumptions (considered as zero TL).

Table 2.1. PHY Operating Lease Total Lease Payments Recognised as Expense in the Period

	1 January - 31 December 2017	1 January - 31 December 2016
The total of the minimum lease payments	572.402.539	466.867.310
	572.402.539	466.867.310

Resource: Deloitte, Pegasus Hava Taşımacılığı A.Ş. and Subsidiaries Consolidated Financial Statements and Independent Auditor's Report as of December 31, 2017, Istanbul, 2018, pp. 50.

Table 2.2. 1 January - 31 December 2016PHY 31.12.2017 Audited Statement of Financial Position (TAS 17)

ASSETS and LIALIBITIES	BALANCE
Current Assets	3.096.832.046
Non-Current Assets	4.991.239.471
Total Assets	**8.088.071.517**
Short-term Liabilities	1.863.750.979
Long-term Liabilities	3.739.682.332
Equity	2.484.638.206
Total Lialibities	**8.088.071.517**

Resource: Deloitte, Pegasus Hava Taşımacılığı A.Ş. and Subsidiaries Consolidated Financial Statements and Independent Auditor's Report as of December 31, 2017, Istanbul, 2018, pp. 2.

Table 2.3. PHY 31.12.2017 Audited Statement of Profit or Loss and Other Comprehensive Income (TAS 17)

INCOME AND EXPENSES	BALANCE
Revenue	5.348.573.409
Cost of Sales	(4.573.774.309)
Gross Profit	**774.799.100**
Operating Profit/Loss	**461.742.202**
Operating Profit/(Loss) before Finance Expense	**633.854.157**
Profit/(Loss) for the Period	**603.267.781**

Resource: Deloitte, Pegasus Hava Taşımacılığı A.Ş. and Subsidiaries Consolidated Financial Statements and Independent Auditor's Report as of December 31, 2017, Istanbul, 2018, pp. 3.

Table 2.4.PHY Non-Cancellable Operating Lease Obligations

	1 January - 31 December 2017	1 January - 31 December 2016
0-1 year	560.853.156	546.554.494
1-5 years	1.378.861.599	1.619.658.343
5+ years	164.687.976	339.147.938
	2.104.402.731	2.505.360.775

Resource: Deloitte, Pegasus Hava Taşımacılığı A.Ş. and Subsidiaries Consolidated Financial Statements and Independent Auditor's Report as of December 31, 2017, Istanbul, 2018, pp. 50.

According to the data shown in Table 2.5, the combined value of off-balance sheet discounted lease liabilities is 1,941,574,506 TL. Hence, the depreciation figure will be roughly TL 295,521,234, while the interest expense will equal to nearly TL 52,228,354.

Table 2.5. Discounted Values of PHY Operating Lease Liabilities

						discounted rate= 0,0269 term= 6,57 years
0-1 year	**2 years**	**3 years**	**4 years**	**5 years**	**5+**	**TOTAL**
546.161.414	326.892.064	318.329.014	309.990.275	301.869.973	138.331.766	1.941.574.506

Table 2.6 demonstrates that the sole category of PHY's balance sheet that remains unaltered after implementing IFRS 16 is current assets. Nevertheless, the shareholders' equity class has experienced a decline, whereas all other classes have shown a growth. The equity class has experienced a decline of about 0.14 (14%). The growth rates of non-current assets, short-term liabilities, and long-term liabilities are around 0.352 (35.2%), 0.301 (30.1%), and 0.4128 (41.28%), respectively.

Table 2.6. PHY IFRS 16 Comparative Statement of Financial Position

ASSETS and LIALIBITIES	BALANCE (TAS 17)	BALANCE (TFRS 16)
Current Assets	3.096.832.046	3.096.832.046
Non-Current Assets	4.991.239.471	6.747.892.614
Total Assets	**8.088.071.517**	**9.844.724.660**
Short-term Liabilities	1.863.750.979	2.424.604.135
Long-term Liabilities	3.739.682.332	5.283.231.907
Equity	2.484.638.206	2.136.888.618
Total Lialibities	**8.088.071.517**	**9.844.724.660**

Upon analysing Table 2.7, it is evident that a modification has taken place in the cost of sales category, namely in the depreciation and operating expenditures. This change has had an impact on all categories, with the exception of revenue. Furthermore, the incurrence of financial charges resulted in a modification of the operating profit/(loss) prior to financial expenses.

The cost of sales has risen, resulting in a corresponding increase in gross profit. Operating expenses, which are included in the cost of sales, contribute to the increase in operating profit/(loss) when the cost of sales decreases, rather than the drop in operating profit/(loss) itself. Given that the finance expense is lower than the depreciation expense, the operating profit/(loss) before finance expense has actually reduced, rather than increased.

Table 2.7. PHY IFRS 16 Comparative Statement of Profit or Loss and Other Comprehensive Income

INCOME AND EXPENSES	BALANCE (TAS 17)	BALANCE (TFRS 16)
Revenue	5.348.573.409	5.348.573.409
Cost of Sales	(4.573.774.309)	(4.296.893.004)
Gross Profit	**774.799.100**	**1.051.680.405**
Operating Profit/Loss	**461.742.202**	**738.623.507**
Operating Profit/(Loss) before Finance Expense	**633.854.157**	**910.735.462**
Profit/(Loss) for the Period	**603.267.781**	**827.920.732**

PHY's financial statements, including the statement of financial position and statement of profit or loss and other comprehensive income, are prepared in compliance with International Financial Reporting Standards (IFRS) 16.

- As PHY will classify the finance lease as a right-of-use asset in the non-current assets category, there will be no change in the current assets. Non-current assets have experienced a growth of roughly 0.352, equivalent to a 35.2% increase.
- According to the assumptions, the operating lease liabilities that have a duration of 0-1 year was analysed. Short-term liabilities experienced a significant increase of roughly 0.301 (30.1%).
- The inclusion of operating lease liabilities for both 1-5 years and 5+ years led to a rise of roughly 0.4128 (41.28%) in non-current liabilities.
- Due to the application of TFRS 16, operating leases are treated as finance leases, resulting in the occurrence of depreciation and financing expenses. This has impacted the net profit for the specified time frame, thereby affecting the Equity category. Corresponding to the depreciation expense and finance expense, there is a reduction of roughly 0.14 (14%) in the Equity category.
- The application of TFRS 16 has led to a net rise of roughly 0.2172 (21.72%) in the balance sheet.
- The drop in the Cost of Sales of PHY can be attributed to the omission of the operational lease expense for 2017, which amounted to TL 572,402,539. This expense exceeded the allocated depreciation amount. It is important to acknowledge that this has an impact on all the remaining items in the statement of profit or loss and other comprehensive income, thereby affecting the equity category. Furthermore, the business examines and evaluates the operating leasing charges inside the cost of sales category. Currently, the depreciation amount is incorporated into the cost of sales. Consequently, the cost of sales dropped by roughly 0.0605 (6.05%) due to the implementation of TFRS 16.
- The gross profit experienced a growth of roughly 0.3573, equivalent to a 35.73% gain.
- The operating profit/loss experienced a growth of roughly 0.5996 (59.96%).
- The operating profit/loss before financial expenses rose by roughly 0.4368 (43.68%).
- The profit/(loss) for the period experienced a growth of roughly 0.3723 (37.23%). Financial expense is one of the factors that influences this ratio. The sub-item in question has a TAS 17 value of TL 118,014,156, as stated in the Pegasus Hava Taşımacılığı Anonim Şirketi Audited Report for the year 2017 (page 3). As per the guidelines of TFRS 16, the amount is TL 170,242,510. The increase is around 0.4425, which is equivalent to a 44.25% rise. The increase is due to the financial expense (interest expense) associated with the transition to TFRS 16.

The financial statements, including the statement of financial position and the statement of profit or loss and other comprehensive income, have been prepared in accordance with International Financial Reporting Standards (IFRS) 16. These statements are based on the applicable assumptions and are provided above. Subsequently, an analysis was conducted on the alterations made to the items within these financial statements. The comparative analysis of the financial accounts reveals the alterations in the financial ratios.

Table 2.8.PHY TFRS 16 Applied Comparative Ratio Analysis Results

RATIO	TAS 17	TFRS 16	CHANGE
Current Ratio	1,66	1,27	Decrease
Net Working Capital / Total Assets	0,15	0,06	Decrease
Financial Leverage Ratio	0,69	0,78	Increase
Short-term Liabilities / Total liabilities	0,23	0,24	Increase
Long-term Liabilities / Total liabilities	0,46	0,53	Increase
Equity Ratio	0,30	0,21	Decrease
Financing Rate	0,44	0,27	Decrease
Gross Sales Profitability Ratio	0,14	0,19	Increase
Operating Profitability	0,08	0,13	Increase
Return on Assets	0,07	0,08	Increase
Return on Equity	0,24	0,38	Increase
Asset Turnover Rate	0,66	0,54	Decrease
Equity Turnover Ratio	2,15	2,50	Increase
EBIT / Total Assets	0,07	0,09	Increase
EBIT / Net Sales	0,11	0,17	Increase
Finance Expense / Net Sales	0,02	0,03	Increase
Interest Coverage Ratio	5,37	5,34	Decrease

The depreciation amount of PHY for the current period, as stated in the financial statements prepared according to TAS 17, was TL 321,762,645. However, when applying TFRS 16, this amount increased by approximately 91.84% to TL 617,283,879 for the current period. The entire difference is included in the cost of sales item. The depreciation amount reported in the cost of sales item, as per TAS 17, was 294,891,927. However, under the application of TFRS 16, it grew by almost 100% (100.21%) to TL 590,413,161 for the present period. Furthermore, it was stated that the implementation of TFRS 16 entails the use of a single model for the lessee, specifically the financial leasing model. Consequently, the interest expenditure derived from the application of TFRS 16 to operational lease contracts has been included in the sub-item for finance leasing interest expense. The sum indicated as TL 52.681.317 in the notes prepared according to TAS 17 has grown by 99.14% to TL 104.909.671 for the present period due to the implementation of TFRS 16.

Upon analysing the current ratio, it becomes evident that the company's ability to meet its short-term loans has diminished.

Upon analysing the financial leverage ratio, it becomes evident that the enterprise's borrowing level from foreign sources and the impact of foreign resources on equity have both declined. Consequently, the enterprise's risk has diminished and its financial structure has become more robust.

Upon analysing the return on assets, it becomes evident that assets are being utilized efficiently, resulting in an increased influence on profit.

Upon analysing the equity ratio, it becomes evident that the proportion of equity in both total assets and the financing structure has declined.

The return on equity indicates a rise in profitability and efficiency of equity.

2.2. General Information About Türk Hava Yolları A.Ş. and Its Subsidiaries And Application Of TFRS 16

Due to the implementation of TFRS 16, which eliminates the off-balance sheet financing technique for lessees, there has been limited discussion on THY's financial leasing transactions, which are based on operating lease transactions.

THY possesses multiple operating leases. THY has operating leases not just for aircraft but also for hangar land. According to the financial statements and independent auditors' report of Türk Havaayolları A.Ş., the operational lease off-balance sheet liabilities for both leases are classified into three categories: less than 1 year, between 1-5 years, and more than 5 years.

Typically, the amounts in THY's related statements are stated in Turkish Lira/s (TL), unless specified differently.

To implement TFRS 16, specific assumptions are required. These assumptions are outlined below:

- THY's financial leasing contracts typically have an average lease length of 10-12 years. According to this lease period, the discount rate of THY is around 0.84%. The rate has been approved as the discount rate to be utilized for calculating the financial expense under TFRS 16.
- The typical duration of THY's financing lease contracts is 10-12 years. Therefore, the maturity period to be considered for computing the discounted value of the liability classified as '5+' in the off-balance sheet liability is 11 years. The reason why 11 years is chosen as the basis is because the specific date on which the assets leased under operational leases are leased is not specified. Thus, in this case, it is preferable to have a maturity period of 11 years, which is considered average.
- The report noted that THY has the opportunity to acquire assets through financial lease agreements. Nevertheless, the financial statements and independent auditor's report do not provide any indication regarding THY's right to acquire in operating lease agreements. Practically, it is assumed that THY has the privilege to buy under operating lease agreements, similar to finance leasing agreements. Furthermore, it has been asserted that THY possesses multiple operating leasing agreements. In this study, the amortisation amount for all operating lease agreements is computed by first determining the maturity using the internal discount formula. The debts are consolidated using the internal discount calculation, resulting in a common maturity of about 11.66 years. The depreciation amount to be calculated in line with Paragraph 32 of TFRS 16 is determined by the useful life of the aircraft, which is 25 years.
- The depreciation method to be used is the straight-line depreciation method.
- The estimates for the maturity classification in the 'THY Non-Cancellable Operating Lease Liabilities' table include the liability for 0-1 year.
- Lease payments are made annually, with equal installments for leases classified as 1-5 years.
- Lease payments are paid according to a fixed rate.
- Both TAS 17 and TFRS 16 consider the tax expense from continuing activities in the statement of profit or loss and other comprehensive income to be zero (0) in their computations.
- The scrap value of assets subject to operating leases is zero (0).
- The statement of profit or loss and other comprehensive income does not include the operating lease expenses for the year 2017, which are recorded as zero TL.

The amount of TL 1.182.000.000, representing the sum of lease payments recorded as expenses during the operating lease term of THY, has been omitted from the statement of profit or loss and other comprehensive income, in accordance with the assumptions (treated as TL zero).

Table 2.9. THY Operating Lease Total Lease Payments recognised as Expense in the Period

	1 January - 31 December 2017	1 January - 31 December 2016
The total of the minimum lease payments	1.182.000.000	738.000.000
	1.182.000.000	738.000.000

Resource: KPMG, Türk Hava Yolları A.Ş. and its Subsidiaries Financial Statements and Independent Auditor's Report as of and for the Year Ended December 31, 2017, Istanbul, 2018, pp. 51.

Table 2.10. THY 31.12.2017 Audited Statement of Financial Position (TAS 17)

ASSETS and LIALIBITIES	**BALANCE**
Current Assets	13.699.000.000
Non-Current Assets	54.948.000.000
Total Assets	**68.647.000.000**
Short-term Liabilities	16.209.000.000
Long-term Liabilities	32.267.000.000
Equity	20.171.000.000
Total Lialibities	**68.647.000.000**

Resource: KPMG, Türk Hava Yolları A.Ş. and its Subsidiaries Financial Statements and Independent Auditor's Report as of and for the Year Ended December 31, 2017, Istanbul, 2018, pp. 1-2.

Table 2.11. THY 31.12.2017 Audited Statement of Profit or Loss and Other Comprehensive Income (TAS 17)

INCOME AND EXPENSES	BALANCE
Revenue	39.779.000.000
Cost of Sales	(31.943.000.000)
Gross Profit	**7.836.000.000**
Operating Profit/Loss	**3.568.000.000**
Operating Profit/(Loss) before Finance Expense	**4.560.000.000**
Profit/(Loss) for the Period	**813.000.000**

Resource: KPMG, Türk Hava Yolları A.Ş. and its Subsidiaries Financial Statements and Independent Auditor's Report as of and for the Year Ended December 31, 2017, Istanbul, 2018, pp. 3.

Table 2.12. THY Non-Cancellable Operating Lease Liabilities

	1 January - 31 December 2017	1 January - 31 December 2016
0-1 year	1.369.000.000	1.167.000.000
1-5 years	3.660.000.000	2.789.000.000
5+ years	2.942.000.000	728.000.000
	7.971.000.000	4.684.000.000

Resource: KPMG, Türk Hava Yolları A.Ş. and its Subsidiaries Financial Statements and Independent Auditor's Report as of and for the Year Ended December 31, 2017, Istanbul, 2018, pp. 49-50.

Based on the data presented in Table 2.13, the aggregate value of off-balance sheet discounted lease liabilities is TL 7,625,276,123. Hence, the depreciation amount will be around TL 305,011,045 and the interest expenditure will be roughly TL 64,052,319.

Table 2.13. Discounted Values of THY Operating Lease Liabilities

						discounted rate = 0,0084 term= 11 years
0-1 year	**2 years**	**3 years**	**4 years**	**5 years**	**5+**	**TOTAL**
1.387.346.291	899.819.540	892.324.019	884.890.935	877.519.769	2.683.375.569	7.625.276.123

Table 2.14 demonstrates that the sole category on the balance sheet that remains unaltered after implementing IFRS 16 is current assets. Nevertheless, due to the application of TAS 17, operating lease expenses were not recognized in the statement of profit or loss and other comprehensive income. However, when this expense is presented in the statement of profit or loss and other comprehensive income as depreciation expense and finance expense in TFRS 16, there is a decrease in equity. Whereas all other classes have shown a growth. The decline in shareholders' equity amounts to about 0.0183 (%1,83). The growth rates of non-current assets, short-term obligations, and long-term liabilities are around 0.1389 (13.89%), 0.086 (8.6%), and 0.2046 (20.46%), respectively.

Table 2.14.THY Comparative Statement of Financial Position as per TFRS 16

ASSETS and LIALIBITIES	BALANCE (TAS 17)	BALANCE (TFRS 16)
Current Assets	13.699.000.000	13.699.000.000
Non-Current Assets	54.948.000.000	62.579.936.636
Total Assets	**68.647.000.000**	**76.278.936.636**
Short-term Liabilities	16.209.000.000	17.608.000.000
Long-term Liabilities	32.267.000.000	38.869.000.000
Equity	20.171.000.000	19.801.936.636
Total Lialibities	**68.647.000.000**	**76.278.936.636**

Upon analysing Table 2.15, it is evident that a modification has taken place in the cost of sales category, specifically in relation to depreciation and operating expenses. This change has had an impact on all categories, with the exception of revenue. Furthermore, the incurrence of financial charges resulted in a modification of the operating profit/(loss) before financial expenses.

The cost of sales has risen, resulting in a corresponding increase in gross profit. Operating expenses, which are included in the cost of sales, contribute to the increase in operating profit/(loss) when there is a decrease in the cost of sales, rather than a decrease in operating profit/(loss) itself. Due to the fact that the finance expense is lower than the depreciation expense, the operating profit/(loss) before finance expense has actually reduced, rather than increased.

Table 2.15. THY Comparative Statement of Profit or Loss and Other Comprehensive Income as per TFRS 16

INCOME AND EXPENSES	BALANCE (TAS 17)	BALANCE (TFRS 16)
Revenue	39.779.000.000	39.779.000.000
Cost of Sales	(31.943.000.000)	(31.066.011.045)
Gross Profit	**7.836.000.000**	**8.712.988.955**
Operating Profit/Loss	**3.568.000.000**	**4.444.988.955**
Operating Profit/(Loss) before Finance Expense	**4.560.000.000**	**5.436.988.955**
Profit/(Loss) for the Period	**813.000.000**	**1.625.936.636**

The financial status and profit or loss statement of THY, prepared in line with IFRS 16, are as follows:

- As THY will classify the finance lease as a right-of-use asset under Non-Current Assets, there will be no change in Current Assets. Non-current assets have experienced a growth of roughly 0.1389, equivalent to a 13.89% gain.
- As indicated in the assumptions, only operating lease liabilities with a duration of 0-1 year are considered. Consequently, there has been a rise of around 0.086 (8.6%) in short-term debts.
- The inclusion of operating lease commitments spanning 1-5 years and 5+ years led to a rise of around 0.2046 (20.46%) in non-current liabilities.
- Due to the application of TFRS 16, operating leases are treated as finance leases, resulting in the occurrence of depreciation and financing expenses. This condition has had an impact on the net profit for the given period, thereby affecting the equity category. The equity class has had a decline of roughly 0.0182 (1.82%) due to the incidence of depreciation expense and finance expense.
- The implementation of IFRS 16 has led to a net rise of roughly 0.1111 (11.11%) in the balance sheet.
- The drop in THY's cost of sales can be attributed to the omission of the operational lease charge for 2017, which amounted to TL 1.182.000.000. This expense exceeded the depreciation amount. It is important to acknowledge that this circumstance has an impact on all the remaining items in the statement of profit or loss and other comprehensive income, which in turn impacts the equity category. Furthermore, the business examines and evaluates the operating leasing charges inside the cost of sales category. Currently, the amortisation amount is incorporated into the cost of sales. Consequently, the cost of sales dropped by roughly 0.0274 (2.74%) as a result of transitioning to TFRS 16.
- Gross profit increased by approximately 0.1119 (11.19%).
- Operating profit/loss increased by approximately 0.2457 (24.57%).
- Operating profit/(loss) before financial expenses increased by approximately 0.1923 (19.23%).
- The profit/(loss) over the time had a nearly 99.99% growth. Financial expense is one of the factors that influences this ratio. The sub-item in question has a TAS 17 value of TL 3,951,000,000, as stated in the Türk Hava Yolları Anonim Ortaklığı Audited Report for the year 2017 (page 3). As per the guidelines of TFRS 16, the amount is TL 4.015.052.319. The increase is roughly 0.0162, equivalent to 1.62%. The increase is due to the financial expense (interest expense) associated with the transition to TFRS 16.

The statement of financial position and statement of profit or loss and other comprehensive income, prepared in accordance with TFRS 16, were given under the applicable assumptions. Subsequently, an analysis was conducted on the alterations made to the items within these financial statements. The financial ratios arising from the study of the financial statements are presented in a comparable manner.

Table 2.16: THY TFRS 16 Comparative Ratio Analysis Results

RATIO	TAS 17	TFRS 16	CHANGE
Current Ratio	0,84	0,77	Decrease
Net Working Capital / Total Assets	-0,03	-0,05	Decrease
Financial Leverage Ratio	0,70	0,74	Increase
Short-term liabilities / Total liabilities	0,23	0,23	No Change
Long-term liabilities / Total liabilities	0,47	0,50	Increase
Equity Ratio	0,29	0,25	Decrease
Financing Rate	0,41	0,35	Decrease
Gross Sales Profitability Ratio	0,19	0,21	Increase
Operating Profitability	0,08	0,11	Increase
Return on Assets	0,01	0,02	Increase
Return on Equity	0,04	0,08	Increase
Asset Turnover Rate	0,57	0,52	Decrease
Equity Turnover Ratio	1,97	2,00	Increase
EBIT / Total Assets	0,06	0,07	Increase
EBIT / Net Sales	0,11	0,13	Increase
Finance Expense / Net Sales	0,09	0,10	Increase
Interest Coverage Ratio	1,15	1,35	Increase

The depreciation amount for the current period in THY's financial statements, prepared according to TAS 17, was TL 3.893.000.000. However, with the implementation of TFRS 16, this amount increased by approximately 77.44% to TL 6.908.011.045 for the current period. The entire difference is included in the cost of sales item. The depreciation amount disclosed in the cost of sales item, in line with TAS 17, was TL 3.687.000.000. However, with the application of TFRS 16, it grew by 81.77% to TL 6.702.011.045 for the present period. Furthermore, it was noted that the implementation of TFRS 16 has introduced a unified approach for lessees, specifically the adoption of the financial leasing model. Consequently, the interest expenditure derived from the application of TFRS 16 to operational lease contracts has been included in the sub-category of finance leasing interest expense. The amount declared as TL 762,000,000 in compliance with TAS 17 has increased by roughly 8.40% to TL 826,052,319 for the present period when TFRS 16 is applied.

Upon analysing the current ratio, it becomes evident that the company's ability to meet its short-term loans has decreased.

Upon analysing the financial leverage ratio, it becomes evident that the firm has expanded its borrowing through foreign resources and the impact of these resources on equity. Consequently, the enterprise's risk has escalated and its financial structure has become less robust.

Upon analysing the return on assets, it becomes evident that assets are being utilized efficiently, resulting in an increased influence on profit.

Upon analysing the equity ratio, it becomes evident that the proportion of equity in both total assets and the financing structure has declined.

The return on equity indicates a rise in profitability and efficiency of equity.

2.3. Findings

After conducting the analyses, both firms experienced a decline in their equity class and an increase in the equivalence of the statement of financial condition. The decline in the equity category is attributable to depreciation and interest costs. The overall increase in the statement of financial position is due to the implementation of the financing lease model, namely the inclusion of non-cancellable operating lease liabilities in the statement of financial position. Both firms' capacity to fulfil their immediate financial obligations, including current assets and short-term liabilities, has diminished. Both entities' capacity to access foreign resources has grown, resulting in a reduced capacity to provide their assets with equity. Furthermore, from the perspective of the shareholders, both firms' shareholders have experienced a rise in their income as a result of the resources they have invested in their respective enterprises. Conversely, the revenue generated from the sales of both businesses has reduced in proportion to the investment made in their assets. Ultimately, PHY experienced a decline in its capacity to produce more revenue from interest expenses, but THY observed the reverse trend. To clarify, PHY's earnings per unit of interest expense declined, whilst THY's earnings per unit of interest expense rose.

3. Conclusion and Discussıon

When examining the impacts of TFRS 16, the focus is on operational lease liabilities, which are evaluated using the finance lease model.

The analysis involved examining the operational lease obligations in the consolidated financial statements and independent auditor's reports, as well as the statements of financial position, statements of profit or loss, and other comprehensive income for the period. Additionally, the footnotes of the associated firms were also scrutinised. Consequently, the application was executed as a consequence of this examination. Several assumptions were made to develop the application. The assumptions used in the study, such as the average lease length and contract maturities, were derived from the independent auditor reports of the organisations being studied. The data underwent essential calculations, yielding outcomes such as the discount rate. The goal of assuming a zero value for the tax expense/item in the statement of profit or loss and other comprehensive income is to simplify the calculating process. Nevertheless, as the independent auditor's findings did not provide the scrap value, this issue represents the boundary of the study.

The discount rate is determined based on the finance lease liabilities as the principal payments of operating leases are not specified in the accompanying notes. The rationale behind computing the discount rate based on financing lease liabilities, as opposed to assumptions, is to ensure a more realistic implementation. This is indicated by the fact that the fixed assets obtained through financing leasing and operating lease agreements are identical, and the lease conditions are similar.

The foundation of the application revolves around non-cancellable operating lease liabilities. The total discounted liability value is determined by computing the present value of these liabilities, taking into account both short-term and long-term maturities. The calculation of depreciation and interest expenses is based on this value, and the resulting amounts are assessed in the corresponding item of the relevant financial statement.

Depreciation and interest expenses that occurred during the adoption of the financial leasing model were included in the appropriate sections of the previously stated financial statements, and updated copies of the financial statements were prepared in accordance with TFRS 16. Analysed financial ratios were applied to the newly generated financial statements. This examination yielded findings regarding the financial performance of the firms under investigation, which were subsequently analysed.

To perform the ratio analysis, various assumptions were used. For example, it was assumed floating interest rate was out of the question for lease payments. Moreover, tax (expense)/income item was considered as zero. Therefore, the assumptions were had impact on the results. In other words, the assumptions can be approximated to real situations to achive realistic results in a more accurate way. In addition, findings of this study are in line with the literature. Put it differently, the results of the analyses were compared with the literature such as Akdoğan (2019) and Özben (2021), it was observed that similar results were obtained if not all. Akdoğan (2019) examined the new regulations introduced by TFRS 16 by comparing them with TAS 17 through financial analysis. In the study, this comparison was made over companies in various sectors. The short and long term liabilities of the enterprises increased, as well as the total non-current assets increased due to the inclusion of right-of-use assets in operating leases. Ozben (2021) evaluated leasing transactions in terms of Tax Procedure Law, TAS 17 and TFRS 16. In the study, financial statements were analyzed and some of the findings obtained are as follows; there was an increase in the net book value of fixed assets and a decrease in the ratio of equity to liabilities. The findings of both studies are similar to the findings of this study.

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Etik, Beyan ve Açıklamalar

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