T.C.
MARMARA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
FACULTY OF BUSINESS ADMINSTRATION
DEPARTMENT OF ACCOUNTING AND FINANCE

EVALUATION OF LEASE ACCOUNTING UNDER IFRS 16 IN COMPARISON WITH THE PREVIOUS STANDARD: ANALYSIS OF THE NEW STANDARD'S IMPACT ON PUBLICLY-LISTED COMPANIES IN TURKEY

Graduate Thesis

ÖZEN METERİZ

Istanbul, 2019

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MARMARA ÜNİVERSİTESİ
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Öğretim Üyesi Adı Soyadı			**İmzası**
1.	Tez Danışmanı	Doç. Dr. ALİ ATİLLA PEREK	
2.	Jüri Üyesi	Dr. Öğr. Üyesi ÇAĞATAY AKARÇAY	
3.	Jüri Üyesi	Doç. Dr. HAMDİYE TUBA ŞAVLI İBİŞ	

GENEL BİLGİLER

İsim ve Soyadı : Özen Meteriz

Anabilim Dalı : İşletme (İngilizce)

Programı : Muhasebe - Finansman

Tez Danışmanı : Doç. Dr. Ali Atilla Perek

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ÖZET

UFRS 16 KAPSAMINDA KİRALAMA MUHASEBESİNİN ÖNCEKİ STANDART İLE KARŞILAŞTIRMALI OLARAK DEĞERLENDİRİLMESİ: TÜRKİYE'DE HALKA AÇIK ŞİRKETLER ÜZERİNDEKİ STANDART ETKİLERİNİN ANALİZİ

Günümüz ekonomilerinde modern işletmeler tarafından geleneksel yapıdaki işletmelere kıyasla dış finansmana daha sıklıkla başvurulduğu görülmektedir. Bunun bir yansıması olarak işletmeler tarafından kullanımına ihtiyaç duyulan varlıklar satın alınmak yerine kiralama ile edinilmektedir. İşletmeler açısından hem operasyonel yükler hem de finansal yüklerden kurtulma katkısının yanında aşırı sermaye gereksinimini de ortadan kaldırmaktadır. Bu durum geleneksel kiralama muhasebesinin de değişen iş hayatının ekonomik gerçeklerini iyi yansıtmadığı gerekçesiyle yenilenmesine neden olmuştur. Yenilenen kiralama muhasebesi çerçevesinde kiracılar açsından kiralamaların sınıflandırılmasına gerek kalmamakta dolayısıyla tek bir kiralama muhasebesi modeli getirilmiştir. Kiralamanın temelinde finansman sağlanma amacı yer aldığı düşüncesiyle kiralama işlemlerinin kredili varlık alımı şeklinde muhasebeleştirilmesi öngörülmüştür. Yeni kiralama muhasebesi modeli çerçevesinde işletmelerin temel finansal göstergelerinde de önemli değişiklikler gündeme gelmiştir. Bu doğrultuda çalışmamızın amacı halka açık işletmelerin yeni kiralama muhasebesini öngören TFRS 16'yı uygulamaya başlamaları ile finansal göstergelerinde ne ölçüde değişiklikler olduğunun ortaya koyulmasıdır.

GENERAL KNOWLEDGE

Name and Surname : Özen Meteriz

Faculty : Business Administration

Subdepartment : Accounting and Finance

Supervisor : Doç. Dr. Ali Atilla Perek

Degree Awarded and Date : Master - June 2019

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ABSTRACT

EVALUATION OF LEASE ACCOUNTING UNDER IFRS 16 IN COMPARISON WITH THE PREVIOUS STANDARD: ANALYSIS OF THE NEW STANDARD'S IMPACT ON PUBLICLY-LISTED COMPANIES IN TURKEY

In today's economies, it is seen that modern businesses are more frequently applied to external finance compared to traditional companies. As a reflection of this, assets that are required by the companies are acquired by leasing instead of purchasing. In addition to both operational and financial burdens, it eliminates the need for excessive capital. This situation led to the renewal of traditional leasing accounting that it does not reflect the economic realities of the changing business life. Within the framework of new leasing accounting, there is no need to classify leases in terms of lessees and thus a single leasing accounting model has been introduced. It is foreseen that the leasing transactions will be accounted for as the purchase of assets by loan with the idea that the purpose of the lease is to provide financing. Within the framework of the new leasing accounting model, significant changes in the basic financial indicators of the enterprises have also come into the agenda. Accordingly, the purpose of our study is to reveal the extent to which changes in the financial indicators are introduced by the publicly listed companies starting to apply TFRS 16, which provides for new lease accounting.

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I firstly thank to my advisor Doç. Dr. Ali Atilla Perek to provide her full support. I would like to thank Muharrem Karataş for great contributions from the beginning to the end of my work, he provided me with unconditional support and shared his experiences and knowledge with me. I would like to thank my dear mother, who is the architect of my life, who give me material and moral support to achieve my goals throughout my life.

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ABBREVIATION LIST

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
BIST	Borsa İstanbul
CGU	Cash Generating Unit
CPI	Consumer Price Index
CU	Currency Unit
EBIT	Earnings before Interest and Taxes
EBITDA	Earnings before Interest, Taxes, Depreciation and Amortization
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
KAP	Public Disclosure Platform
LIBOR	London Interbank Offered Rate
POA	Public Oversight Accounting and Auditing Standards Authority
ROU	Right of Use
TAS	Turkish Accounting Standards
TFRS	Turkish Financial Reporting Standard
WACC	Weighted Average Cost of Capital
VAT	Value Added Tax

INTRODUCTION

Companies need a number of assets and resources to provide these assets in order to be able to start their activities, sustain their existence, achieve growth and maximize their value. Therefore, in the first part of the study, capital structures are analyzed. Companies may consider some factors while determining the capital structure. The main factors are leverage, cost of capital and government policy. There are advantages and disadvantages of internal and external sources for companies. Companies may have some advantages using external resources such as cost saving, tax benefit, quality. However, there are some disadvantages like control, unexpected additional cost.

Businesses need to make new investments to compete with other businesses. However, it is not always possible to finance these investments with the shareholders' equity. Although businesses need new investments and want to follow technological developments closely, the reasons such as their inability to find the desired credit from the banks to meet their financing needs or the tax advantages provided by authorities lead businesses to rent.

In addition to these issues, businesses are entitled to the right to use that asset by paying for installments in specified periods of time for a certain period instead of owning an asset and thus protecting themselves in the risks and operational burdens of purchasing. Leasing is not only operationally flexible, but it also eliminates aging and residual value risks for the lessee.

In order to be able to recognize the leases that are commonly applied by the companies, the leases should be classified as operating or financial leasing in accordance with IAS 17 and tax practices. As the accounting principles vary according to the type of the lease, they affects the statement of financial position and income statements of the companies' according to the lessee and the lessor side.

On the other hand, in January 2016, the International Accounting Standards Board published IFRS 16 Leases that is effective from 1 January 2019. Thus, the new standard and lessee will have to account for almost all lease agreements as assets for use in their statement of financial position, as well as the related lease obligations as liabilities under the right to use model. On the other hand, accounting requirements for lessor remains similar to the current practice. TFRS 16 Leases is issued by the POA to be effective on the same date.

In the first part of the study, financial resources of companies' for their continued operations are included.

In the second part of the study, the lease concept was examined. The literature review of the lease transactions is performed. In this process, the academic studies in our country and in the world related to the leasing operations have been mentioned.

In the third section, the recognition process according to TAS 17 will be examined in terms of the lessee and the lessor and then the need for TFRS 16 has been mentioned. The principles of TFRS 16, which are related to the lease transactions, are explained in terms of rules, definitions, recognition, measurement and disclosure principles.

In the fifth section, TFRS's 16 impact for the publicly listed companies in Turkey for BIST 100 were analyzed, and the financial statements prepared by the company according to previous standard were examined. It is analyzed the financial statements that will be changed when TFRS 16 standard is applied, the financial statements, financial ratios such as financial structure, liquidity and profitability are also analyzed and its impact are summarized comparatively.

A study on the financial statements of these companies has been carried out and the changes in the financial statements and of the companies' are analyzed after IFRS 16 Leases standard has applied.

1. FINANCIAL SOURCES FOR CAPITAL INVESTMENTS

Companies need a number of assets and resources to provide these assets in order to be able to start their activities, sustain their existence, achieve growth and maximize their value. In order to make these, companies need financial sources which affect their financial position and financial performance. Also; these are elements of financial statements defined in the Conceptual Framework for Financial Reporting issued by IASB are assets, liabilities and equity, which are linked to financial position of the company. Those elements are associated with the economic resources and claims are defined in Table 1.

Table 1
The Elements of Financial Statements

Item	Element	Definition or description
Economic resource	Asset	A present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits.
Claim	Liability	A present obligation of the entity to transfer an economic resource as a result of past events.
	Equity	The residual interest in the assets of the entity after deducting all its liabilities.

Resource: Conceptual Framework for Financial Reporting, 4.2 Table 4.1

Assets, liabilities and shareholders' equity are the elements of the statement of financial position is part of the complete set of financial statements comprising of statement of financial position, total comprehensive income statement, statements of cash flows and changes in equity of the companies.

The above mentioned economic sources present the financial position of the company as follows:

Table 2
XYZ Group – Statement of financial position as at 31 December 20X9 (in thousands of currency units)

ASSETS	**31 December 20X9**	**31 December 20X8**
Non-current assets		
Property, plant and equipment	X	X
Goodwill	X	X
Other intangible assets	X	X
Investments in associates	X	X
Available for sale investment	X	X
Total non-current assets	**X**	**X**
Current assets		
Inventories	X	X
Trade receivables	X	X
Other current assets	X	X
Cash and cash equivalents	X	X
Total current assets	**X**	**X**
Total assets	**X**	**X**
EQUITY AND LIABILITIES		
Equity attributable to owners of the parent		
Share capital	X	X
Retained earnings	X	X
Other reserves	X	X
Non-controlling interests	**X**	**X**
Total Equity	**X**	**X**
Non-current liabilities		
Long-term borrowings	X	X
Deferred tax	X	X
Long-term provisions	X	X
Total non-current liabilities	**X**	**X**
Current liabilities	X	X
Trade and other payables	X	X
Short-term borrowings	X	X
Current portion of long-term borrowings	X	X
Current tax payable	X	X
Short-term provisions	X	X
Total current liabilities	**X**	**X**
Total liabilities	**X**	**X**
Total equity and liabilities	**X**	**X**

Resource: IAS 1-Presentation of Financial statements, Part I: Illustrative presentation of financial statements

As shown in Table 2, the financing resources of the company are divided into two as shareholders' equity and liabilities.

1.1. Own Capital-Shareholders' Equity

One of the financial resources of the companies is shareholder's equity. Equity is defined in IASB's conceptual framework: *"Equity is the residual interest in the assets of the entity after deducting all its liabilities. Equity claims are claims on the residual interest in the assets of the entity after deducting all its liabilities. They are claims against the entity that do not meet the definition of a liability".*[1]

This means that a company takes all of its assets (current and non-current) and deducts all liabilities (current and non-current) so the result is the company's equity.

"The balance sheet is the line-by-line version of the basic accounting equation"[2] The basic logic here is:

Assets= Liabilities + Owner's Equity

Shareholders' equity presents how much of a company's operations is financed by equity so, it is the most common financial metrics used by analysts. Shareholders' equity is not only indicator of a company's financial health; it can used with other tools and metrics, the investors can analyze the wealth of the company. [3]

Shareholder's equity will include items such as[4]:

- Capital stock par or stated value
- Additional paid-in capital or amounts paid over par
- Retained earnings representing the undistributed earnings of the entity

[1]IFRS, Conceptual Framework for Financial Reporting, March 2018, pg.38, https://www.ifrs.org/

[2]Michael P Griffin, How to Read and Interpret Financial Statements: A guide to understanding what the numbers mean to you, 2015, pg.20

3Shareholders' Equity (SE),https://www.investopedia.com/terms/s/shareholdersequity.asp (4 February1 2019)

[4]Michael P Griffin, How to Read and Interpret Financial Statements: A guide to understanding what the numbers mean to you, 2015, Section:4

Because the shareholders have the title of partnership, deb is also a part of the equity.

Companies can also create shareholders' equity through public offering. Public offering can be generally defined as the sale of shares through call and announcement to a large number of previously unknown investors. Methods of offering to public may vary depending on different conditions.[5] There are various reasons why a company should consider an initial public offering. Mainly, companies benefit from a significant source of funding by opening up to the public and allowing their shares to be traded in an organized market. Using own shares as a guarantee, companies can obtain credits and issue debt securities after they are offered to public. As a result of this, shares are started to be traded on the Stock Exchange.[6]

1.2. External Funding-Liabilities

Another financial source is liabilities. *"Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events".*[7]

Liabilities are defined in IASB's conceptual framework:

"A liability is a present obligation of the entity to transfer an economic resource as a result of past events."[8]

Liabilities categorized according to due dates as current and non-current liabilities.[9]According to Bierman; *"Current liabilities are obligations that are to be paid within one year, while noncurrent (or long-term) liabilities are those coming due in more than one year". "This is important, since the solvency of an organization is based on its ability to meet payment obligations when due".*[10]

Examples of short-term liabilities may bank loans, lease liabilities, accounts payable, salary payable, taxes payable, interest or dividends payable, and advances from customers. According to Bierman; *"These items are current liabilities if they are due within a year (or*

[5]https://www.borsaistanbul.com/en/companies/public-offering-and-listing-in-borsa-istanbul/equity-market/public-offering, 16.03.2019
[6]https://www.borsaistanbul.com/en/companies/public-offering-and-listing-in-borsa-istanbul/equity-market/public-offering, 16.03.2019
[7]Griffin, pg.20
[8]IFRS, Conceptual Framework for Financial Reporting, March 2018, pg.32, https://www.ifrs.org/
[9]Harold Bierman, Introduction To Accounting And Managerial Finance, An: A Merger Of Equals, 2010, pg.39
[10]Bierman, pg. 39

within the operating cycle of the organization)". Non-current liabilities may long-term bank loans, long-term lease liabilities, bonds, mortgages, and notes. According to Bierman;"*If part of these items is due within 12 months, that amount –shall be classified as a current liability"*. "*It is the due date, not the title that determines whether an obligation is classified as short-term or long -term"*.[11]

Also, lease payments which companies should pay for their rentals are one of liabilities of the companies.

1.3. Determination of Capital Structure

Capital structure is the long-term source of companies such as long-term liabilities and shareholder's equity. Determination of capital structure is important for companies, because it directly affects the firm value.[12]

Companies may consider some factors while determining the capital structure. Some of them are leverage, cost of capital and government policy. Leverage indicates the ratio of liabilities that the company meets their assets. Another important factor is cost of capital. When cost of capital increase, the value of the firm decrease. Therefore companies tend to decrease cost of capital. But companies consider some specific factors as following:[13]

a) Nature of business: If the operations are for long-term, the company tend to equity rather than liability. So this selection decreases the cost of capital.

b) Size of the company: If the company has small size, it will use more external sources. As a result of this, the cost of capital increases.

c) Legal requirements: Some of companies are restricted for increasing their capital certain sources such as banks.

d) Expectations of investors: Collecting funds from different type of investors, it is more suitable for companies to issue different source of securities.

[11]Bierman, pg. 39
[12]C. Paramasivan and T. Subramanian Financial Management 2009, pg.47
[13]Paramasivan and Subramanian, pg. 50

Another factor to be considered for the capital structure is government policy such as government grants and tax policies.[14]

These factors can be classified as internal factors. Also there are some external factors. These factors are related to the economy and the sector in which the company operates its activities and the specific conditions for the country where the company operates its activities.[15]

Companies consider these factors to determine the optimal capital structure which is the best combination of shareholder's equity and long-term liabilities.[16] The optimal capital structure is the point that reaches a balance between the risk level and the estimated rate of return and this also maximizes the firm value.[17]

Recently, leverage becomes an important consideration for companies that is used in company's capital structure. Leverage is an investment strategy of using borrowed money — specifically, the use of various financial instruments or borrowed capital to increase the potential return of an investment. Leverage can also refer to the amount of debt that firm uses to finance assets. When one refers to a company, property or investment as "highly leveraged," it means that item has more debt than equity.[18]

1.4. Advantages and disadvantages of external source in comparison with internal sources

The most important reason of the tendency to external source is low operational costs, the second most important criterion is focusing on core activities; the third most important criterion is gaining flexibility. [19]

There are advantages and disadvantages of internal and external sources for companies.

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[14]Paramasivan and Subramanian, pg. 50
[15]Rataporn Deesomsak, Krishna Paudyal, Gioia Pescetto, The Determinants of Capital Structure: Evidence from the Asia Pacific Region, Journal of Multinational Financial Management, 2004, Sciencedirect, 9 February 2019

[16]Apostol Luiza, Optimal Capital Structure - Objective of the Financing Decision, Agricultural Management / Lucrari Stiintifice Seria I, Management Agricol, 2017,Ebscohost, 7 February 2019

[17]Luiza, pg.177
[18] Leverage, https://www.investopedia.com/terms/l/leverage.asp, 16.03.2019
[19]Bertrand Quelin and Francois Duhamell, Bringing Together Strategic Outsourcing and Corporate Strategy: Outsourcing Motives and Risks, European Management Journal, October 2003, Vol. 21, pg.654, Ebscohost, 12 January 2019

Companies may have some advantages using external resources as follows[20];

- Cost saving and increase efficiency
- Quality : Outsourcing can improve quality, especially specialist in a key area
- Geographical: Outsourcing can be used to solve problems with geographical distance.
- Time savings
- Tax benefit: Companies can decrease taxes in terms of saving on cost if the right destination is selected for outsourcing.[21]

Using external resource brings some risks together with its advantages. Some of them are follows[22];

- Control: Outsourcing provides the control to the provider.
- Quality of service: The quality of the good or service must be monitored because of the contractor's incentive to save money.
- Contract costs: The time required to manage the contract may make it more expensive
- Unexpected additional cost.

Another important advantage is technological innovations. It is difficult to survive for companies who do not follow technological innovations. But, keep up the latest technology is difficult, risky and costly for companies. Therefore; companies make easier adopting technological innovations via outsourcing. [23]

[20]Peter R. Embleton, Phillip C. Wright, A practical guide to successful outsourcing, Empowerment in Organizations, 1998, Vol. 6 Issue: 3, Issue: 3, pg.98-99, Emeraldinsight, 12 January 2019

[21]Maqsood Ahmad Sandhu, Ahm Shamsuzzoha, Petri Helo, Does outsourcing always work? A critical evaluation for project business success, Benchmarking: An International Journal, Vol. 25 Issue: 7, 2018, pg. 2202, Emeraldinsight, 12 January 2019

[22]Embleton and Wright, pg.99-100
[23]Sandhu, Shamsuzzoha, Petri, pg. 2202

2. LEASES

2.1. Concept of Lease

The concept of leases should be considered first legally, then the effects of these practices on the accounting of companies should be evaluated within the framework of the concept of substance over form.

A classic and generic definition is as follows:

"Leasing is a contract that includes the right of use of asset for a certain period of time".[24]

"A lease is an agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time".[25]

According to Coyle, *"Lease is an agreement in which the owner of an item, for example a business asset or a piece of real estate, allows someone else to use it for a specified time, in return for a rental".*[26]

The common features of these definitions are:

- Agreement
- Certain time
- Transfer of right of use
- Lease payment

Leasing is a one of financing method for businesses to reduce their capital costs, to borrow more and to provide tax advantages.[27] In particular, it is more desirable to rent machinery, equipment, aircraft, buildings, and investment equipment that require large

[24]IFRS 16, Appendix A, Defined Terms, pg:21
[25]IAS 17,Definitions, paragraph:4
[26]Coyle, pg:1
[27]Can Öztürk, UFRS 16 Kiralama İşlemleri Standardının Eski UMS 17 Standard ile Karşılaştırılması ve Almanya ve Türkiye'de HisseSenetleri Halka Açık Olan HavaYolu Şirketlerinin Finansal Durumuna Etkisi, The Word of Accounting Science, Cilt / Volume: 18 Sayı / Issue: 1 Mart / March 2016, pg:2, Ebscohost, 27 September 2019

investments, instead of purchasing them.[28]

According to numbered 6361 Financial Leasing, Factoring and Financing Companies Law; *"Financial lease agreement is the agreement which prescribes that lessor, upon request and selection of lessee, shall leave, in return for rent, to enjoy all rights, the possession of a property purchased from a third party or the lessee or acquired otherwise and title of which is vested upon it"*.[29]

2.2. As one of the resources of external financing: Leases

Today, due to the rapidly developing technology and economic reasons, companies are not sufficient to sustain their operating activities by own resources. Companies' own resources are not sufficient, so the use of outsourcing increases day by day. Therefore the importance of the leases increases as an alternative financing sources. Companies tend to leases for many reasons. Some of them are:[30]

a) Size: Smaller companies lease more than large companies because they have some difficulties to access alternative financing resources.

b) Industry: Service and utilities companies use more leases such as airlines and retail stores.

c) Nature of assets: Companies lease more generic assets for example generally fixed assets.

d) Leverage: Having high leverage companies generally have less debt capacity, so they tend to more leases.

e) Taxes: Buying or leasing something has different tax rate for companies. Because buying and depreciating the asset allows low rate of tax deduction than leasing because of

[28] Ümmühan Aslan, UFRS 16 Kiralamalar Standardı Kapsamında Faaliyet Kiralamasının Kiracı İşletme Tarafından Muhasebeleştirilmesi ve Raporlanması, The Journal of Accounting and Finance, January 2018, pg:56, Ebscohost, 24 January 2019

[29] 6361 Financial Leasing, Factoring and Financing Companies Law, Part Four, Section One

[30] Ana Isabel Morais, Why companies choose to lease instead of buy? Insights from academic literature, Academia Revista Latinoamericana de Administración, Vol. 26 Issue: 3,2013, Emeraldinsight, 19 January 2019

reduction of finance cost and depreciation.

f) Ownership structure: Higher managerial ownership is related to higher debt and lease.

In addition to these issues, companies are entitled to the right to use that asset by paying for installments in specified period of time for a certain period instead of owning an asset and thus they are protecting themselves from risks and operational load of purchasing. Leasing is not only provide flexibility, but it also eliminates obsolescence and residual value risks for the lessee.

2.3. Counterparties of Lease Agreements

According to Coyle, "The owner of the leased asset is the lessor and the user of the asset is the lessee".[31]

Lessor

"The company or person that ensures the asset that have right to use for a certain term of time in exchange for consideration".[32]

Lessee

"The company or person get the asset that have right to use for a certain term of time in exchange for consideration".[33]

2.4.The Effectiveness of Lease System

In recent years, due to the intensive leasing of companies, the regulatory authorities have been closely monitored and regulated to improve the quality and control of the effectiveness of lease system.

In our country, the regulatory and supervisory authority of financial institutions other than Banks was made by the Banking Regulation and Supervision Agency. Financial leasing

[31]Coyle, pg:1
[32]IFRS 16, Appendix A
[33]IFRS 16, Appendix A

practices are carried out in accordance with 6361 Financial Leasing, Factoring and Financing Companies Law published in the Official Gazette dated 13 December 2012 and numbered 28496.[34]

In the absence of any provision in this law, special provisions are applied according to the general provisions of the numbered 6098 Code of Obligations (Borçlar Kanunu) and the nature of the contract.

Financial Leasing Association (FİDER) is an organization established by law has a members of financial leasing companies. The purpose of the Financial Leasing Association is to prevent some companies in the sector from utilizing the advantages of financial leasing in line with their own interests and to protect the reputation of the sector. Members of the association must comply with some rules. According to 6361 Financial Leasing, Factoring and Financing Companies Law ;*"Within six months starting from the date on which this Law enters into force, a Union of Financial Leasing, Factoring and Finance Companies shall be established as a legal entity with the qualification of a public institute. The companies must become a member of the Union within one month following the date of obtaining their operating permit".*[35]

As a recent development about leases in Turkey for local regulation; foreign exchange leases are prohibited by domestic enterprises by making amendments in article 4 of the decision to protect the value of Turkish currency. This amendment has issued in the Official Journal no: 30534 and dated 13.09.2018. This amendment will be applied to the contracts that are applicable as of that date prospectively.

The aim of this regulation should be minimized the currency speculation by reducing the use of the exchange rate in exchanges between contractors (companies or people) and suppressing the currency in the economy. Companies which are previously made lease agreements in foreign currency should revise their contracts which included lease payments in terms of TL. Hereafter, lease payments for new lease agreements cannot be determined in

[34]Finansal Kiralama Derneği (Fider),http://www.fider.org.tr/pageStructure.aspx (16.02.2019)
[35]6361 Financial Leasing, Factoring and Financing Companies Law, Part Five, Section One

foreign currency. Therefore, it will be possible to determine the lease payments and discount rates in local currency in terms of these enterprises.

2.5.Types of Leases in Terms Of Accounting Practices

Leases are mainly classified into two categories as operating lease and finance lease according to transfers of the risks and rewards between lessee and lessor in terms of accounting practices. In determining whether a lease is an operating lease or finance lease, the substance of the transaction is taken into account rather than the form of the contract.[36] In most cases the same classification (finance lease or operating lease) is appropriate for both the lessee and the lessor. However, in some cases different classifications are appropriate.[37]

2.5.1. Operating Lease

A lease that does not transfer to a large extent of all the risks and rewards from having ownership of an underlying asset.[38]

An operating lease is common used especially in technological companies because of the rapid change in topics every two or three years. Generally, the lessee does not expect to purchase the asset at the end of the lease term. [39]

As an example of operating lease can be car fleet leases, office leases, office equipment leases, hardware leases.

2.5.2. Finance Lease

A lease is a type of lease that transfers to a large extent all the risks and rewards from having ownership of an underlying asset.[40]

Risks contain the probability of damages from off capacity or technological aging, changes in return due to change in economic situations (change in residual interest value).

[36]IAS 17, Classification of leases, paragraph: 10
[37]IFRS Foundation—Supporting Material for the IFRS for SMEs Standard, Module 20:Leases, page:8, www.ifrs.org, 16.03.2019
[38] IFRS 16, Appendix A, Defined Terms
[39]Coyle, pg:32
[40] IFRS 16, Appendix A, Defined Terms

Rewards can be arising the anticipation of profitable operation within economic lifetime of asset's and gain from increase in residual interest value.[41]

As following conditions alone or with others bring lease transaction can be categorized as a finance lease:[42]

a) at the end of the lease term, the lease transfers ownership of the asset to the lessee;

b) the lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised;

c) the lease term is for the major part of the economic life of the asset even if title is not transferred;

d) at the inception of the lease the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset;

e) the leased assets are of such a specialized nature that only the lessee can use them without major modifications.

Following situations that individually or in combination can be categorized as a finance lease are:[43]

a) if the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee;

b) gains or losses from the fluctuation in the fair value of the residual accrue to the lessee (for example, in the form of a rent rebate equaling most of the sales proceeds at the end of the lease)

c) the lessee has the ability to continue the lease for a secondary period at a rent

[41]IFRS Foundation—Supporting Material for the IFRS for SMEs Standard, Module 20:Leases,page:8, www.ifrs.org, 16.03.2019
[42]IAS 17, Classification of leases, paragraph: 10
[43] IAS 17, Classification of leases, paragraph: 11

that is substantially lower than market rent.

The most common finance leases especially preferred to capital intensive companies are construction equipment, machinery and equipment and facilities.

Finance lease plays an important role in increasing the productivity and profitability by using the companies' working capital for their other needs by leasing instead of purchasing the investment goods.

2.5.3. Comparison Of Operating And Finance Lease

There are significant differences between operating and finance lease. Liabilities and assets related to finance leases are presented in the statement of financial position whereas liabilities and assets related to operating leases are excluded from the statement of financial position. This distinction is reflected in accounting practices. Since the purpose and method of the application are different, the accounting of operational and finance leases is quite different.

In other words, the real purpose is using it in operations and not to bear operational risks and costs, rather than owning property.

2.5.4. Sale-and-Leaseback

According to IAS 17; *"A sale and leaseback transaction involves the sale of an asset and the leasing back of the same asset"*.[44]

The point that separates this contract from the financial lease is that the seller and the lessee of the leasing contract are the same person, that is, the property of the leased property is the property of the lessee before.

Sale-and-leaseback have many reasons for seller-lessees to enter into transactions, such as managing cash flows, facilitating operational decisions, and tax considerations.[45]

[44] IAS 17, Sale and Leaseback transactions, paragraph:58
[45] PWC, In depth, IFRS 16 Implications for lessors in the real estate industry, July 2018, https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-16/ifrs-16-implications-lessors-real-estate-industry.pdf ,16.03.2019

Sale-and-leaseback transactions have some tax advantages as following:[46]

a) *Corporate Tax Exemption:* The gain on the sale of the real estate sold to the financial leasing companies is exempt from the corporate tax by 100%, provided that they are withdrawn for leasing purposes and at the end of the contract.

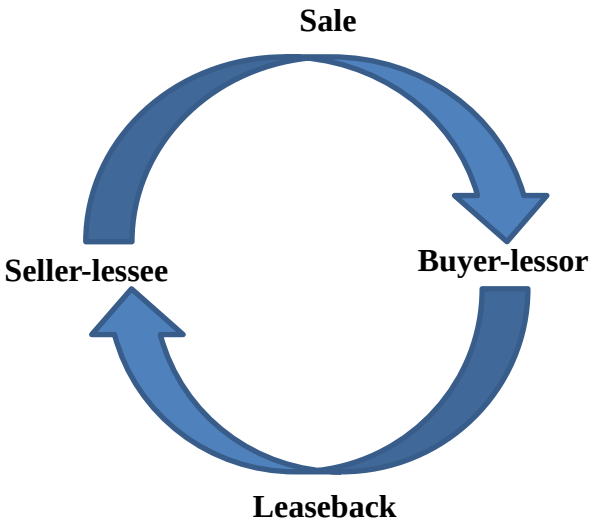
b) *Value Added Tax Exemption:* The sale of the real estate to leasing companies, the lease of these real estate properties back to the seller at the end of the contract period and the transfer of the real estate property are exempt from VAT.

c) *Documentary Taxes Exemption:* Papers issued for sales and leasing transactions made under financial leasing agreement shall be exempt from stamp duty and duty.

d) *Title deed fees:* Real estates leased by sale and leaseback method in the name of the lessee at the end of the contract period is exempt from the title deed fees.

Via these tax regulations, it can be said that the attractiveness of the model of providing financing by selling and leasing has increased for the all sizes companies. Sale-and-leaseback method, which is used as a common financing method in international practice, may be one of the important alternatives for medium-term financing of companies in the near future.

Figure 1: Sale and leaseback



[46]Reyhan Yılmaz, Sat – Geri KiralaİşlemiİleSağlananVergiselAvantajlar, 26 May 2014, https://www.verginet.net/dtt/1/sat-geri-kirala-vergi.aspx, (16 February 2019)

Sukuk (Leasing Certificate) is a financial instrument that is used frequently in our country. It is same as bond expressed stock certificate for Islamic Law.[47]

Sukuk is another type of financial instrument that generate an income that provide an ownership of asset.[48] It generally used in Islamic finance. The AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions), defines "sukuk" as: "… *certificates of equal value representing, after closing subscription, receipt of the value of the certificates and putting it to use as planned, common title to shares and rights in tangible assets, usufructs and services, or equity of a given project or equity of a special investment activity"*[49]

One of the basic reason arises of this type of financial instrument is increasing the variety of financial products and services. In this context, sukuk plays an important alternative for the investors who interested in interest-free banking.[50]

Sukuk also provides tax advantages related to lower withholding rate compared to participation accounts. The fact that investors who do not prefer other investment products to bring their savings to the market through leasing certificate is a positive development for the economy.[51]

2.5.5. Subleases

According to IFRS 16, sublease is "*a transaction for which an underlying asset is re-leased by a lessee ('intermediate lessor') to a third party, and the lease ('head lease') between the head lessor and lessee remains in effect*".[52]

In subleases, intermediate lessor make classification of the sublease as finance lease and operational lease considering conditions below:[53]

a) In the event that the main lease is a short-term lease that the lessee is has accounted for by applying paragraph 6, the lease is classified as an operating lease.

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[47]Bade Orhan, Sukukun yapısı ve işleyişinin analizi, Ticari bilimler Fakültesi Dergisi, Cilt 2, Sayı 2, http://dergipark.gov.tr/jcsci, 2018, 18 February 2019

[48]Tan Wan Yean, "Sukuk: Issues and the way Forward", International Lawyers Network Articles, (http://www.iln.com/articles/pub_1674.pdf, 17 February 2019).

[49] AAOIFI Standard 17

[50]Halil İbrahim Alpaslan, Yeni Bir Finansman Araci Olarak Sukuk (Kira Sözleşmesi) Ve Muhasebeleştirilmesi, Finansal Araştırmalar ve Çalışmalar Dergisi, Cilt: 6, Sayı: 11, Temmuz 2014, ISSN 1309-1123, ss. 15-31 DOI: 10.14784/JFRS.2014117325

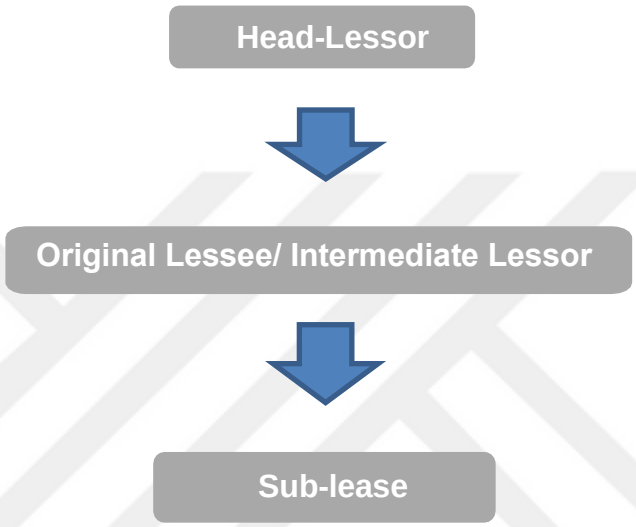
[51]Bade Orhan, Sukukun yapısı ve işleyişinin analizi, Ticari bilimler Fakültesi Dergisi, Cilt 2, Sayı 2, http://dergipark.gov.tr/jcsci, 2018, 18 February 2019, pg:14

[52]IFRS 16, Appendix A, Defined Terms

[53]IFRS 16, Sublease Classification, paragraph: B58

b) *In other cases, the subleasing is classified according to existence of right-of-use asset arising from the main lease, instead of underlying asset.*

Figure 2: Sublease



3.LEASE ACCOUNTING UNDER TFRS 16 AND IN COMPARISON WITH PREVIOUS STANDARD (TAS 17 LEASES)

3.1.IFRS 16

The previous standard (IAS 17 *"Leases"*) indicated tenants and lessors to classify leases as finance lease or operating lease to recognize for the lease differently based on two types of leases. This accounting type was criticized because, it does not fulfill the needs of financial statements users because it does not explicitly present the leasing transactions because assets and liabilities of the lessee due to operating leases were not recognized.

In January 2016, IASB issued IFRS 16 Leases as a result of a ten-year project in order to improve the accounting of leases in line with to eliminate the differences. In our country, TFRS 16 *"Leases"* issued on 16 April 2018 by POA. It replace the TAS 17 *"Leases"* TFRS Interpretation 4 *"Determining whether an Agreement contains a Lease"* and the TAS Interpretation 15 *"Operating Leases – Incentives"* and changes in TAS 40 *"Investment Property"* Standard.

According to this new standard, companies will need to change the way that they account for leases, with many of them bring into the balance sheet for the first time. The new standard accompany of the 'key question'. The question has changed from 'it is an operating lease or finance lease' to 'whether the transaction contains a lease'. Also, hereinafter entities need to test the lease definition instead of lease classification.[54]

TFRS 16 ends lessee's categorization as operating and finance lease. In place of this, leases should no longer be classified as financial and operating leases, but it should be accounted for under a single model based on leasing accounting of all lease contracts. The new standard entails recognizing the assets and liabilities of the rights and obligations created by all lease agreements. All leases will be accounted for using same accounting model based on right

[54] Lease Definition, The new on-/off balance sheet test, KPMG, April 2017,page:2

of use of asset. So via this radical modification, the new standard provides more transparency and comparability for the financial statements.[55]

Lessor accounting will remains similar to current requirements (dual accounting model). Lessors continue to classify leases as finance and operating leases. Lessor shall classify leases considering transfers of risks and rewards as finance leases or operating leases.

One of the studies on the impact of the new standard states that the addition of all leases to the balance sheets will significantly affect the quality of their decisions of financial statement users, especially lenders, investors and business analysts. Also via new standard, the comparison between the company's financial statements will be more meaningful.[56]

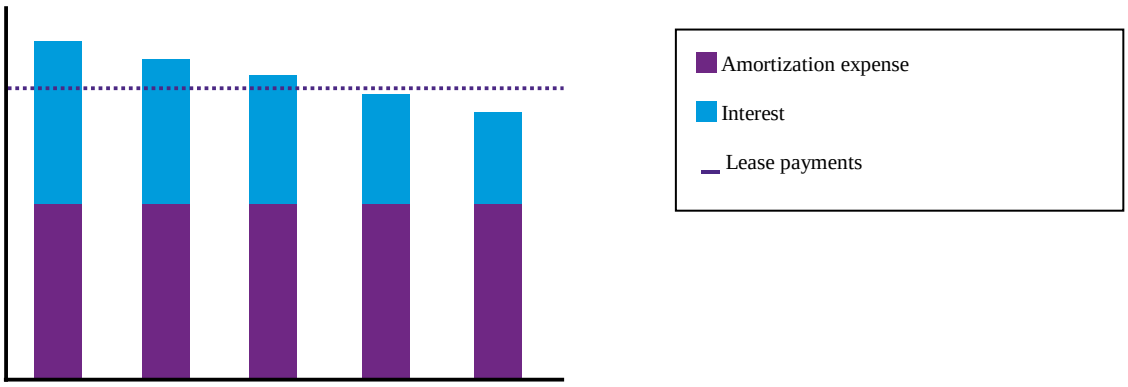
3.1.1. Key Facts and Key Impacts Of New Standard

TFRS 16 is will have an important impact on lessees, especially for companies that have a huge amount of operating leases. All leases would be recognized for an asset on the statement of financial position which is now referred to as a right of use asset. At the same time, a lease liability equal to the amounts that the leased asset will be paid for the usage of the leased asset should be recognized. Operational leasing transactions can only be recognized as an expense when the asset is low value and short term.

The new requirements will most likely affect the statement of financial position of lessee. The impact will affiliated with the nature of lease agreements and whether the lessee selects to implement the simplifications, exemptions and expedients in TFRS 16. In general, one could expect that there will be an increase in recognized assets and liabilities in the financial statements of lessees. In the first years of the lease, the lease will be less accounted for in the following period due to prepaid finance expense and the lease charge. This is different from straight line expense recognition according to operating lease on IAS 17.

[55] Investor Perspective: A new lease of life, IFRS, January 2016, https://www.ifrs.org/-/media/feature/resources-for/investors/investor-perspectives/investor-perspective-jan-2016.pdf
[56] R.E.G.A. Ron van Kints, L.L. Louis Spoor, Leases on balance, a level playing field?, 11 November 2018, Sciendirect, 10 May 2019

Figure 3: Effect of lessee's statement of profit or loss



Resource: IFRS 16 Leases, A more transparent balance sheet, First Impressions, KPMG, January 2016, https://assets.kpmg/content/dam/kpmg/pdf/2016/01/leases-first-impressions-2016.pdf ,page:2

There will be also change in the classification of lease expenses as a result of TFRS 16 because lease expenses will now be classified in financing and amortization costs instead of operating costs.

To implement for the lease definition and application the lease accounting model under TFRS 16, it will require significant judgment especially for lessees. Determination of lease period and liabilities arising from future lease payments may cause challenges for companies.

TFRS 16 brings the lessee to recognize all leasing agreements on the statement of financial position except less than 12 months period lease or low-value items.

The change in the approach for accounting of leases under the new TFRS 16 will affect the statements of the financial position of companies and the ratios related to the financial position such as the total assets, net assets, debt / equity ratio based on these statements. TFRS 16 will also affect the statement of profit or loss because, the company shall recognize interest expense on the lease liability and amortization expense on the asset. According to the previous standard, lease contracts are classified as operating leases, so The total expenses at the starting of the lease period will be higher than the previous standard.

Figure 4: Effects on Key Performance Ratios



Profit or loss	Statement of Financial Position	Ratios
EBITDA	Total Assets	Debt to Equity Ratio



EPS	Net assets	Interest Cover
(in early years)		Asset Turnover

Resource: IFRS 16 Leases, A more transparent balance sheet, First Impressions, KPMG, January 2016, https://assets.kpmg/content/dam/kpmg/pdf/2016/01/leases-first-impressions-2016.pdf, page: 33

There will be significant increases in EBIT / EBITDA for companies which have high number of operating lease agreements. The reason is that all payments made for operating leases had recognized as rent expense in accordance with TAS 17, whereas these expenses after TFRS 16 will be reflected in the financial statements as interest and depreciation, therefore they will not be taken into account in EBITDA calculation.

The key point of the analysis on the new leases standard is whether the customer controls the use of identified asset where IAS 17/IFRIC 4 risks and rewards analysis where pricing was a significant consideration.

The new standard have much impact for many companies. First of all, companies will review their all lease contracts and lease data to determine whether these contracts contain a lease transaction or not. As a result, systems and processes will also be affected. Company's key financial ratios are also affected because of the recognition of assets related to leasing and lease obligations. Another important consideration is selection of transition method. Because this affect the cost of implementation of standard and comparability of the financial statements.

3.1.2. Lease definition

According to IFRS 16*"A lease is a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration"*. [57] If a lease agreement includes a lease, it will be recognized on lessee's statement of financial position. Determining whether the entity has the right to control the use of the asset is an important point.[58]

Lease agreements differ from service agreements as follows: a leasing transactions allow the customer with the right to control the use of an asset; however in a service agreements, the supplier holds control.[59]

An asset is generally defined in the contract clearly. An asset is indirectly defined when it is made available to the customer.[60] An asset is not required to be specified at the beginning of the agreement, but it shall be specified on the date when it is made available to the lessee. A defined asset may be a proportionally separate part of wide asset, like the large proportion of total capacity.

Lease contract needs to contain all three key elements to qualify as a lease: identified asset, obtaining substantially all of the economic benefits and directing the use of the asset.[61] The criteria for all three has to be met for the contract to contain a lease.

For example, leased car is identified asset when specified in the contract. Second, driver have economic benefit when drive the car. Lastly, driver decide where and when to use car. All three elements are required to have a lease.

3.1.2.1. Identified Asset

Determining if there is an identified asset or not in the contract consists of three steps.

The first step is assessing whether there is a specified asset in the contract. An asset

[57] IFRS 16, paragraph 9
[58] IFRS 16, paragraph B9, B10
[59] PWC In depth, A look at current financial reporting issues, IFRS 16- a new era of lease accounting, page :3
[60] IFRS 16, paragraph B13
[61] IFRS 16, paragraph B9

can be specified explicitly or implicitly.[62] As an example of explicitly, lease rental car, a 4th floor of a building, or 60% of a warehouse. Besides that, it can be implicitly specified as the facts and circumstances for example; only a specific asset could be used to fulfil the contract. Because of economic or legal factors, lessor only has one asset available to perform the contract.[63]

The second step is to determine whether the asset is corporeally separate or if not, whether the customers possess the right to obtain almost all of the capacity of the asset. TFRS 16 states that the lessee does not need to lease a nearly entire asset for a lease but there are exact criterion which correspond for a part of the identified asset. When a lessee does not use the whole asset, there can only be an identified asset if the capacity portion used is corporeally separate or obtain almost all of the total capacity.[64] For example 2nd floor of building is a physically distinct portion of the building, therefore this is an identified asset even though it is not the whole building. "Substantially all" term is not a defined term in the standards therefore judgment is required to determine whether substantially all of the capacity of an asset is being made available to the customer.

The third step for determining the existence of the substitution rights of the supplier, and if so whether these rights are substantive or not. The principal right of substantive substitution takes place when the lessee has both the possibility to substitute alternative assets and provides economic benefits. . If there are substantive substitution rights, there cannot be an identified asset and therefore there cannot be a lease.

A practical ability throughout the period of use requires:[65]

- Substitutes are ready to use or available in probable time.
- Lessee cannot prevent another substitution.
- Right is neither contingent on a specific event, nor for only a part of the contractual

[62]IFRS 16, paragraph B13
[63]Lease Definition, KPMG, April 2017
[64]IFRS 16, paragraph B20
[65]IFRS 16, paragraph B14

term.

- Substitution rights for warranties are not considered.

But, the lessee provides the economic benefit from substitution lead to change in evaluation of whether there is a lease or not:

- High hurdle as benefits is need to exceed costs.

The following should be taken into account in evaluating whether the lessee has economic benefit from replacement:

- Cost of replacement such as transportation cost.
- Any foregone production or reduced production units vs increased production volume from substituted assets.
- Location of assets – where the asset exists at the customer's location, the expenditures of replacement is likely to exceed the benefits.

As an example, leasing of aircraft, lessee might specify the interior design of the aircraft according to own preferences. The substitution of aircraft results a significant cost.[66]

The assessment of existence of substantive substitution rights should be made at the beginning of the contract. It is based on facts and circumstances at that date and should exclude future events which are not considered likely to occur.[67]

Repairs and maintenance costs are not considered substantive substitution rights.

3.1.2.2. Economic Benefits

The agreement does not include a lease, if the customer does not have the right to get almost whole of the economic benefits arising from using of asset.[68] As mentioned before, TFRS 16 does not define exactly "substantially all". Therefore, judgment is required for this

[66]PWC, In depth, A look at current financial reporting issues, IFRS 16- a new era of lease accounting, , page :3
[67]IFRS 16, paragraph B16
[68]IFRS 16, paragraph B21

decision. Parties should consider the primary output and other benefits (like by-products from use) to determine whether the criteria is met. For example, advantages that only accrue to the legal owner of an asset associated with ownership rather than use are not considered. The standard explains that the company assesses the right to get almost whole of the economic benefits derived related use of the asset, so the company take into consideration these economic benefits within the identified extent of right of use asset.[69]

3.1.2.3. Directing The Right To Use

The next step is whether there is a control over the right to use the asset or not, which is 'whether the customer directs the use of the identified asset. According to TFRS 16, in order to determine who leads the usage of the assets, it is considered who lead 'type of use and aim of using the leased asset'[70]. If the customer makes the 'type of use and aim of using the leased asset', the agreements contain a lease. Conversely, if the supplier makes those decisions, the contract does not contain a lease, but it can be a service contract.

If type of use and for what aim of usage purpose for asset is determined, the assessment of whether the contract includes a lease is subject to the following:[71]

- During the term of right of usage of the leased asset, the lessees have no right to change instructions related to lease agreement
- The lessee has designed the asset in advance for determining type of use and for what aim of usage purpose the leased asset will be used for the duration of its use

3.1.2.4. Protective Rights

In order to protect the rights of the supplier in the asset or in other assets, the terms and conditions that established to protect the personnel or to ensure that the supplier complies with the laws and regulations are protective.[72] Protective rights show the scope of the

[69]IFRS 16, paragraph B22
[70] In practice, it will be referred as "how and for what purpose the asset is used".
[71]IFRS 16, paragraph B24
[72]IFRS 16, paragraph B30

customer's right of use but it do not prevent the customer from having the right to direct the use of an asset.[73]

3.1.2.5. Practical Expedients

There are two optional practical expedients for lessee. In the new standard there are two important optional exemptions for the lessee in terms of 12 months or less lease term and low-value asset leases. But these expedients are not available for lessors.

Unless another systematic approach by lessee benefiting from these exemptions does not reflect the timing of the lease expected by the lessee, the lease payments are accounted as expense straight-line basis during the term of the lease.[74]

In addition, the lessee decides to benefit from the exemptions should be explained in the notes to the financial statement in which the practical expedients is selected in terms of the lease .[75]

3.1.2.5.1. 12 months or less lease term

The first practical expedient is related to the 12 months or less term leases. The tenant may exempt short-term leases from the applying the new accounting model. If this exemption is selected, the exemption applies to all leases included in the related asset class.[76]In order to benefit from this practical expedient, there should be no purchase option in the lease agreements.

In the evaluation of short-term lease, it is necessary to examine not only the period covered in a reporting period, but the total period of time to obtain the right of use of the leased asset over the whole contract for more than 12 months. In other words, if a total of 5-year lease agreement is signed for 3-month periods during the summer season, this exemption will not be available since the total rental period will be 15 months. Instead, the contract included 3 month monthly rentals for each summer season for a period of 4 years; the total rental period would

[73]IFRS 16, paragraph B30
[74]IFRS 16, paragraph 6
[75] IFRS 16, paragraph 53 and 60
[76] IFRS 16, paragraph 8

be 12 months and could be considered as exemption.

Therefore, the determination of the duration of the contract will be more important for the companies depending on the preference of the exemption applied in the accounting of the leases. In order to benefit from this exemption, there should be no purchase option in the lease agreements. It must also be applied to the entire asset class.

Daily car rental made in airports is an example of short-term lease.

3.1.2.5.2. Low-Value Asset

Low value items leasing is the second practical expedient. If the lease has a low value item, the lessee can select not to apply the new standard. The value of the item that shall asses the value of the asset when it is new. Therefore, even if a second-hand equipment is leased, it is necessary to take into account the value of the leased equipment when it is new, in order to apply this exemption.[77]

TFRS 16 does not make a clear determination as to which amount is the low-value. IASB stated that low-value asset can be items that their costs are USD 5,000 or less in basis for conclusion section of the standard. [78] However, companies will have to make their own decisions about which leases are low-value. If this exemption is selected, the exemption applies to all leases in the related asset class.[79] So the company might have thousands of low-value items that are leased that add up to a significant value, but these can still evaluate for the low value exemption. In case the lessee expects to lease an asset under the sub-lease, the head lease is not considered as a low-value asset.[80]

Example 1:[81]

Company A is a large, technology company with nearly CU 10 billion in its yearly income. It signs agreement to lease one floor of an office plaza in America for total lease fee of CU 50,000 per year for 5years. The management of the plant and the lease expenditure is not

[77] IFRS 16, paragraph B3
[78] IFRS 16, paragraph BC100
[79] IFRS 16, paragraph 8
[80] IFRS 16, paragraph B7
[81] IFRS in practice, IFRS 16 Leases, BDO, https://www.bdo.global/getattachment/Services/Audit-Assurance/IFRS/IFRS-in-Practice/IFRS16-Leases_print.pdf.aspx?lang=en-GB, page 9, example: 1.

material to company A.

Evaluation

When the lease is not material to company A (it constitutes 0.0005% of the yearly income), a floor of an office plaza is not in general taken into consideration to be of 'low value'. In addition to this, comparing its cost to those items as samples of items that 'low value' criteria for example telephones and laptops. So, the lease does not fulfill the low value lease exemption.

General short term lease examples can be laptops, tablets, desktop and mobile phones.

3.1.2.6. Lease And Non-Lease Components

Many lease agreements include lease and non-lease components, (service component). Lessees need to know how to define them and how to account them.

Lessees often enter into contract with lessors that includes a right to use multiple underlying assets. If a right of use asset is considered as a distinct lease elements, that is a distinct lease.

If the following conditions are applied, the right of use asset is a separate lease component[82]:

1) The lessee may benefit from use of the underlying asset alone or in combination with other readily available resources

2) The underlying asset does not depend on other underlying assets, or to a large extent it does not relate to other underlying asset.

Low-value item exemption: A lessee applies the low-value item exemption to each separate lease. Therefore, multiple assets provided under a lease contract can be considered to be low value only if each individual asset qualifies as a 'separate lease component'.

Lease contracts may also contain non-lease components that should be accounted for using other applicable accounting standards. A non-lease component is a component of a lease

[82] IFRS 16, paragraph B32

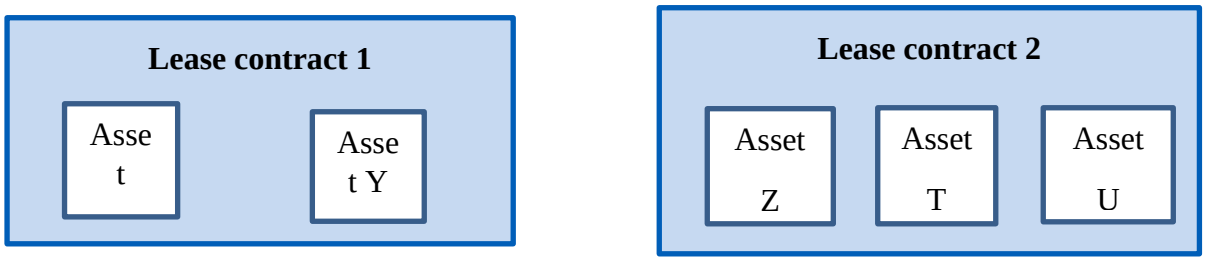
contract that does not lead the right to use an asset but, it provides or transfers other goods and/ or services. For example, maintenance services is specified as component that does not contain a lease in the agreement so, this is accounted separately.

According to TFRS 16, the allocation of an assessment in an agreement to lease elements and elements which does not contain lease that meet the necessity of TFRS 15 *"Revenue Contracts from Customer"* on distribution of the transaction fee to performance obligations.[83]

There is a practical exemption related to components of e lease. Lessee may choose not to separate elements that not contain lease from lease elements on per underlying asset class basis. Instead, it can be accounted for each lease element and related to element that does not contain a lease as only one lease element. Moreover, this practical exemption for lessees does not allocate a lease and non-lease elements so, this sometimes prevent the complication and expenditures. But, using that facilitator causes the recognition the service component on lease liability for a lessee, if not it will not be included in the statement of financial position until they perform the service by the lessor.[84] This practical expedient is not applicable to lessors.

As shown below; in the first lease contract, the lessee rents two physically distinct assets (Asset X and Asset Y) and the lessee determines that each asset is a separate lease element. However, the tenant identifies only two separate lease components in the second lease contract even though the lessee rents three physical distinct assets (Asset Z, Asset T and Asset U).

Figure 5: Lease and non-lease elements



[83] IFRS 16, paragraph BC136
[84] IFRS 16, paragraph BC135



3.1.2.7. Combination Of Agreements

TFRS 16 allows combination of two or more agreements and similar agreements with the same counterparty (or counterparty parties) or similar agreements to be recognized as a single agreement when one or more than one below circumstances are provided [85]:

a) the agreements are negotiated in a package for a single trading purpose that cannot be understood unless dealt with together;

b) the amount of payable under an agreement is based on the fee or performance of the other agreement; or

c) having usage right for assets constitutes one lease agreement.

3.1.2.8. Capacity Portion

If part of the capacity of the asset is physically separate, it can be the identified asset (such as, one floor of a building). If a portion or some other part of the capacity of the asset is not physically separate (such as, a portion of the fiber wire network), that has not considered as identified asset if it does not correspond almost whole of the capacity of the asset. Therefore it gives the lessee the right to get almost whole of the economic benefits derived from the use of the asset.[86]

Example 4a – Fiber Optic Line

A client signed a 15-year agreement with a supplier for the right to use a certain

[85] IFRS 16, paragraph B2
[86] IFRS 16, paragraph B20

amount of portion in a line which links Hong Kong with Tokyo. This portion is equivalent to the customer having the full portion of 3 fibers strands within a 15 strand line. The supplier makes decisions about the transmission of data (which fibers are used to transfer the lessee's data).

Evaluation

The agreement does not include a lease as the specified capacity is not physically distinct and it does not represent substantially all of the underlying asset as the capacity is only 20% of the total capacity of the line. If the agreement specified an amount of capacity equivalent to, say, 14 fibers strands of the total line, the agreement could include a lease because this reflects substantially all (approximately 94%) of the line's capacity.

Example 4b – Fiber Optic Line (specified strands)

A customer signed a 15-year agreement with a supplier for the right to use 3 of 10 specific strands of fiber line linking Paris and London. The customer has the exclusive right to use these strands to transfer data.

Evaluation

The agreement includes an identified asset as the strands of fiber line are distinct from each other and the vendor does not have the right to substitute the strands for others in the same line. The number of strands not being almost whole of the cable's total capacity, so the strands are identified, hence the agreement ensures a specified asset to the customer.

Resources: IFRS in practice, IFRS 16 Leases, BDO, page: 14, 15

3.1.2.9. Separation of contract components

Some leases of real estate may include components that contain more than one lease element and non-lease element at the same time. Tenants must know how to define and calculate them.[87]

[87] IFRS 16, paragraph 12

Contracts may include:

- One or more lease components: for example; land and / or building

- items that do not have one or more leases: for example, cleaning and maintenance services.

However, the tenant can elect not to make separation the leasing components from the non-lease components according to the class of the underlying asset. The lessee who makes this selection calculates the leasing component and the non-lease component as a single leasing component.[88]

First of all, if the lessee meets the following criteria, it assesses the right to use asset as a separate lease element:[89]

– the lessee may benefit from using that underlying asset alone or in combination with other available resources; and

– the asset is not highly depends on, nor related with, the other assets in the agreement.

After identification of a components, lessee and lessor accounts the components.

Tenant accounting

Lessee distribute the consideration in the agreement to every lease element regarding:[90]

– the relevant separate transaction fee for every lease element; and

– the total separate transaction fee of the non-lease element.

The lessee shall decides the relevant separate transaction fee of lease and non-lease elements regarding the fee that a lessor can price an entity for a similar element distinctly.

[88] IFRS 16, paragraph 15
[89] IFRS 16, paragraph B32
[90] IFRS 16, paragraph 13

If an observable separate transaction fee cannot be easily reached, the lessee presumes the separate transaction fee of the elements can be taken by maximizing the applying of observable knowledge.[91]

Lessor accounting

The lessor distributes the factor in the agreement regarding TFRS 15 considering the separate transaction selling fees of the goods and services containing every element.[92]

3.1.2.10. Joint Leases

Agreements can be signed for the common area lease such as maintenance hangars in the airport area, office space under the airline control, lounge rooms for airline customer.

Contracts that cannot likely to be leased in relation to airports; common facilities, such as common entrance doors, check-in counters.

Example 2-Concession place

A coffee company (Customer) has signed an agreement with an airport operator (Supplier) to use a place in the airport to sell its products for a 3 year. In the agreement, it is stated that the area of place and that the place can be located close to any of the doors in the airport. Supplier has the right to relocate the space allocated to Customer at any time during the period of use. There are many areas in the airport that would meet the features for the place in the agreement.

The agreement has not include lease.

Despite the area of place Customer uses is designated in the agreement, there is no determined asset. Customer has right to control its kiosk. But, the lease agreement is for place in the airport, and this place can alter at the judicial discretion of Supplier. Supplier has the substantive right to replace the place Customer uses because:

Supplier can change the place used by Customer during the term of use. There are

[91] IFRS 16, paragraph 14
[92] IFRS 16, paragraph 17

many areas in the airport that provides the features for the place in the agreement, and Supplier has the right to alter the areaof the place to other place that meets the features at any time except Customer's confirmation.

Supplier will benefit economically from substituting the place. There could be minimum cost to change the place used by Customer because the kiosk can be switched easily. Supplier benefits from replacing the place in the airport because substitution permits Supplier to make the most effective use of the place at boarding areas in the airport to provide altering conditions.

Resources: IFRS 16, Illustrative Examples, Example 2- Concession Space

3.1.2.11. Portfolio Application

If the company has a reasonable expectation that the impact on the leases of implementing TFRS 16 to the portfolio that consists of similar characteristics does not become dissimilar materially from implementing TFRS 16 to the each lease in portfolio, it may apply TFRS 16 to this portfolio. The company uses forecasts and presumes that represent the size and structure of the portfolio while recognizing it.[93] For instance; it can implement a portfolio approach to retailers with a chain of stores across the country with similar qualifications of contractual arrangements for store leases in different regions or in different cities.

3.1.3. Lessee Accounting

According to new lease standard, tenant performs a one type of lease recognition type that it recognizes whole leases on statement of financial position similar to finance lease as long as the practical expedients are applied.

3.1.3.1. First Recognition Liabilities Arising From Leases

At the date when the lease actually started, lease liability is measured at the present value of future lease payments discounted using the interest rate implicit by lessee.[94] For this

[93] IFRS 16, paragraph B1
[94] IFRS 16, paragraph 26

measurement, lease period, lease payments and discount rate are critical elements.

3.1.3.1.1. Lease Period

The lease period starts on the date when the lease actually begins. In addition to this, all lease periods including free charge of period, in other words there are periods without lease payments are considered within this term.[95]

The lease term includes non-cancellable period. That is the period over which a lease creates enforceable rights and obligations. If the tenant is probably exact to use to extend or terminate the lease, this option shall be taken into account in determining the lease term.[96]

The shorter the lease period cannot be cancelled, a lessee is more likely to extend the lease. The reason for this as the rental period shortens, the cost of replacement will probably increase.

A lease period may also be defined as outcome of the contract such as the number of production units taken from the equipment such as the mileage distances for using of vehicles.

Example 2: Company P signed lease contract for machine that including a period that cannot cancel of 4 years and 2 year fixed-priced revision alternative with future lease obligations that are intended to nearly market rates at the beginning of lease. There are no punishment or other considerations for the company and P is reasonably certain, so the lease period is four years as it cannot implement the renewal alternative.[97]

Example 3: Company Q signed a lease contract for a plaza that including a period that cannot cancel of four years and a two-year, market-priced renewal option. Before it takes ownership of the plaza, company Q pays for leasehold improvements. The leasehold improvements are expected to valuable at the end of four years, and that value could be realized through continued occupancy of the leased property. At the starting date of lease, company Q makes a decision that it is almost exact to use the renewal alternative because it could encounter important punishment if it left the leasehold improvements at the ending of initial term. At

[95] IFRS 16, paragraph B36
[96] IFRS 16, paragraph B35
[97] E&Y, Applying IFRS, A closer look at IFRS 16, December 2018, page:41

starting date of lease, company Q finalized that the lease period is six years.[98]

Example 4: Company R signed a lease contract for an identified retail place in a shopping center. The retail place will be available to company R for October, November and December during a non-cancellable term of five years. The lessor agrees to provide the same retail place for each of the five years. At the beginning of lease contract, the lease period is 15 months (three months per year over the five annual periods specified in the contract). This is important for short-term lease exemption.[99]

3.1.3.1.2. Lease Payments

Lease payments consist of many payments as detailed below.

3.1.3.1.2.1. Fixed Payments

Fixed payments can be found the inherently fixed payments, deducted any lease incentives receivable. Payments with fixed essence'[100] are payments that are structured as variable lease payments which cannot be avoided by lessee. Some examples are following:[101]

- A minimum amount that cannot be refrain from paying.
- There are multiple fees that a lessee can pay, but one of these payment groups is factual.
- There should be more than one realistic payment group which the lessee can make payment, but it has to make at least one of payment group.

3.1.3.1.2.2. Variable Payments

The initial measurement of the lease liability includes only those variable lease payments that depend on an index or a rate such as LIBOR or consumer price index.[102] Another changeable lease payments do not contain the initial recognition of the lease liability like

[98] E&Y, Applying IFRS, A closer look at IFRS 16, December 2018, page:41
[99] E&Y, Applying IFRS, A closer look at IFRS 16, December 2018, page:41
[100] It is referred as "in-substance fixed payments" in IFRS 16.
[101] IFRS 16, paragraph B42
[102] IFRS 16, paragraph 28

payments that depends on percentage of the lessee's sales or usage of the underlying asset. Instead of this, those payments are recognized in the profit or loss when the conditions or situations are constituting these payments is made.[103]

Variable lease payments that depend on an index or rate are evaluated at the beginning of the lease. This means that lessee does not predict future inflation, so it recognizes lease liabilities assuming that there is no change in inflation during the rest of the lease period.[104]

3.1.3.1.2.3. Foreign Currency Lease Payments

There is no detailed guidance about the reorganization of the effects of differences in the foreign currency exchange rates associated with lease obligations in a foreign currency. Lease liability of a lessee is a monetary item, as a result, lease obligation is required to be remeasured at the end of each reporting period using closing foreign exchange rates in accordance with TAS 21 *"The Effects of Changes in Foreign Exchange Rates"*.[105]

Even though this approach may lead to instability in profit or loss arising from the accounting of differences in the foreign exchange rate, entities shall separately explain these changes as gains or losses as foreign currency exchange. In this case, it is clear that readers of financial statements can see the gain or loss arising from change in foreign exchange rates. This is consistent with TAS 21.[106]

Asset that have right to use is a not a monetary item for foreign currency, so this transaction will be translated using the exchange rate at the date of the transaction; Therefore, if the company leases in a currency other than its functional currency, this will create a foreign currency mismatch, although exposure to foreign currency risk is economically present. This situation is expected to be quite common in the airline sector because, aircraft rentals are mostly made in USD.

3.1.3.1.2.4. Taxes On Lease Payments

Real estates are usually subject to the property tax that counted as a tax rate multiplied

[103] IFRS 16, paragraph BC169
[104] IFRS 16, paragraph BC166
[105] IFRS 16, paragraph BC196
[106] IFRS 16, paragraph BC199

by the value of the property. Based on the legal authorities, the juridical requirement for paying the real estate tax may belong to the lessor (owner of the property) or tenant. How they can take into account the taxes based on their leased property is considered as important. The party making the cash payment to the tax office will not be very important for this evaluation.[107]

In our country, owners of the real estate are responsible for the payment of the property tax. Therefore, if the lessee does not state in the contract, the real estate taxes paid on behalf of the owner shall not be considered as part of the lease payments. Since financial institutions such as the Banks do not have VAT liability, they should take into account the VATs accrued in the lease payments as part of the lease payments.

3.1.3.1.2.5. Renewal, Termination And Purchase Options

One of the payments consist of the initial measurement of the lease liability is the payment of the penalty. If the lessee is reasonably certain that it will use the option to pay the lease or if the lessee will use an option to terminate the lease term, these shall be considered.

At the beginning date, the entity evaluate the tenant is almost exact to use a choice to roll over the lease or the option to buy an asset, or does not use the choice to end the lease. The company takes into consideration all related conditions and situations that provide an economical encouragement for the lessee to use, or not to use the choice. These can include any changes expected to occur in conditions and situations from the date when the lease was actually started.[108]

The past experience of the lessee on the period of use of certain types of assets which rented or owned may ensure information on the evaluation of implementation.[109]

For example, significant leasehold improvements, negotiation costs, relocation costs, termination penalties, availability of suitable alternatives, conditionality may affect the lessee's decision.

[107] KPMG, Real estate leases, the tenant perspective IFRS 16, October 2018,page 15, https://home.kpmg/content/dam/kpmg/xx/pdf/2018/10/real-estate-leases.pdf
[108] IFRS 16, paragraph B37
[109] IFRS 16, paragraph B40

3.1.3.1.2.6. Residual Value Guarantees

Residual value guarantees a guarantee made to a lessor that the value of an underlying asset returned to the lessor at the end of a lease will be at least a specified amount.[110] It can be provided by the tenant or another party that is not related to the tenant or the lessor. If the tenant is no longer guaranteed a value, it must include the expected amount in this payment.

The exercise price of a purchase option is the price that the lessee is reasonably certain to exercise.

3.1.3.1.2.7. Variable Payments That Become Fixed

These are payment that are initially structured as variable associated with the use of the underlying asset but which will become fixed in the rest of the lease period when the variability is eliminated at a point after the date when the lease starts actually . So, the payment is included in the lease liability.[111]

3.1.3.1.3. Discount Rates

The discount rate is one of the key inputs when measuring the lease liability. When the lessee determined the initial measurement of the lease liability, the discount rate is used to calculate the present value of the lease payments.

Under TFRS 16, a lessee will use the 'rate implicit in the lease' as the discount rate unless that rate cannot be readily determined. In that case, the lessee is required to use its 'incremental borrowing rate'.

3.1.3.1.3.1. Implicit vs Incremental Borrowing Rate

IASB stated that it may be difficult for a lessee to estimate the 'rate implicit in the lease'. For instance, a lessee usually does not have certain information about the amount of the initial direct expenditures or a lessee havs finite information related to the expected residual

[110] IFRS 16, Appendix A, Defined Terms
[111] IFRS 16, B42(a)(ii)

value regarding the underlying asset at the end of the lease period. Lessees will use their incremental borrowing rate in these cases.[112]

According to TFRS 16; *The lessee's 'incremental borrowing rate' is the rate that a lessee would have to pay on the commencement date of the lease for a loan of a similar term, and with similar security, to obtain an asset of similar value to the right of use asset in a similar economic environment.*[113]

For a portfolio of leases that have similar characteristics can be applied single discount rate. "*A portfolio of leases has similar characteristics when the leases have similar remaining lease period, with similar underlying asset class, in a similar economic environment"*.[114]

3.1.3.1.3.2. Discount Rate At Group Level

Some lessees companies can lease their assets from parent company. New standard does not contain information for this topic.

The subsidiary cannot automatically use its parent or group rate in its distinct financial statements. However in some situations, it may use its parent company's incremental borrowing rate as data. But it can use it by editing the suitable discount rate for a lease.[115]

3.1.3.1.3.3. Modifications And Reassessment in Discount Rates

A lessee shall recalculate the rental obligation via rearranged rentals and discount rate when there is alteration in the lease period or an alteration in the evaluation of the tenant is almost certainly to use choice to buy the leased asset and change in flexible interest rate results from change in future rental payments[116]. According to IASB, in these circumstances, the conditions of the agreement of the lease have amended and it is suitable to re-evaluate the rate of discount confirmed with the alteration contained in the recognition of the lease obligation.[117]

A lessee shall decide a new or rearranged discount rate at all times a lease is changed.

[112] IFRS 16, BC161
[113] IFRS 16, Appendix A, Defined Terms
[114] IFRS 16, BC287
[115]KPMG, Leases discount rates- what is the correct rate, September 2017,page:22
[116] IFRS 16, BC193-BC195
[117] IFRS 16, BC194

There are two changes outcomes according to whether the lessee recognize the changes as a distinct lease or not.[118] When the modification is accounted for as a separate lease, the discount rate is not revised. When the modification is not accounted for as a separate lease, the discount rate is revised and it is specified as the interest rate implicit or incremental borrowing rate according to the outcomes of whether the rate could be easily specified or not.[119]

3.1.3.1.3.4. Weighted-Average Cost Of Capital (WACC) As Discount Rate

It would not be appropriate for a lessee to use its WACC. Because WACC refers to the weighted average cost of various financial liabilities such as bonds, bank loans and equity capital issued for financing the investments and activities of the company. WACC contains borrowings and equity, but the incremental borrowing rate contains only borrowings. Sometimes, a company's WACC may be a useful input data for the determination of the incremental borrowing rate.[120]

3.1.3.2. Initial Measurement Of The Right-Of-Use Asset

At the actual starting date of lease, the right-of-use asset is measured at cost consisting of total of lease obligation, direct costs of lease at the beginning, prepayments, and expenditure to restore and deduct incentives received.[121]

3.1.3.2.1. Initial Direct Cost

The direct costs of lessees at the beginning are the incremental costs of getting a lease unless otherwise agreed. These can be commissions' costs that paid to real estate agents or intermediaries, legal fees that paid to notary, negotiation costs for lease period and circumstance of lease agreement.[122]

3.1.3.2.2. Dismantling, Removing Or Restoring Costs

At the end of the lease period, dismantling and removing cost for an asset can be added to the right of use asset if there is a provision to be allocated in accordance with TAS 37. For

[118] IFRS 16, 44-45
[119] IFRS 16, 45(c)
[120] KPMG, Leases Discount rates, what's the correct rate?, September 2017
[121] IFRS 16, 24
[122] IFRS 16, Appendix A-Defined Terms

instance, in most cases, the lessee is mandatory to return the underlying asset to the lessor in a particular situations or to reconstruct the location of the asset. The lessee recognizes a provision in accordance with TAS 37 with the other side of the entry to the right of use asset.[123]

3.1.3.2.3. Lease Incentives

Lease incentives are payments made by the lessor to the lessee in relation to the lease or the compensation of the lessee costs performed by the lessor. These are the followings[124]:

- Payments that are made to or in the name of the tenant in relation to a lease
- Presumes the tenant's cost to be lowered by the lessor such as supposing a lessee's pre-existing lease with a third party

Lease incentives, such as rent free periods or contributions by lessor to lessee's relocations cost will decrease lease liability on balance sheet and lease payment profit or loss table.

3.1.3.3. Subsequent Recognition Of The Lease Liability

The lease liability is subsequently measured at amortized cost using the effective interest method. On each payment, the lease liability will be partially amortized and an interest expense will be recognized in the profit or loss. On the other hand, after commencement date, a lessee measures the right of use asset by applying the cost model, unless the revaluation model in TAS 16 has been selected by the lessee or using the market value if the asset that have right to use correspond the criteria for defining as investment property under TAS 40. According to TFRS 16, measurement of lease liabilities at fair value subsequently is not permitted.[125]

3.1.3.3.1. Reassessment Of Lease Liability

When the amount to be expect to pay on the residual value guarantee or rate for example consumer price index, in-substance fixed payments, lease term, floating interest rate and assessment of purchase options lessee changed, that would be required to re-measure the

[123] IFRS 16, paragraph:24(d)
[124] IFRS 16, Appendix A-Defined Terms
[125] IFRS 16, paragraph: BC183

lease liability. [126]

Table 3
Reassessment of Lease Liability

Part of the lease liability	Reassessment
Lease period and related continuation and discontinuance payments	When? – When the lease period has altered. How? –the rearranged payments using a rearranged discount rate (The interest rate implicit in the lease for the rest of lease period (if readily decided) or incremental borrowing rate at the date of rearrangement).
Exercise price of a purchase option	When? – If a significant event or change in circumstances occurs that is within the control of the lessee and affects whether the lessee is reasonably certain to exercise an option. How? –the revised payments using a revised discount rate (The interest rate implicit in the lease for the remainder of lease term (if that rate can be readily determined); otherwise: incremental borrowing rate at the date of reassessment).
Amounts expected to be payable under a residual value guarantee	When? – If expected amount has altered. How? – Incorporate the rearranged residual payment using the discount rate that does not alter.
Changeable lease payment depends on an index or a rate	When? – If a change in the index/rate results in a change in cash flows. How? –the revised payments based on the index/rate at the date when the new cash flows take effect for the rest of the period using the discount rate that does not alter. (Exemption: the discount rate must be updated if the alteration resulting from a variable interest rates changes).

Resources: In depth, A look at current financial reporting issues, IFRS 16-a new era of lease accounting, PWC, https://www.pwc.com/pg/en/publications/ifrs-news/in-depth-

[126] IFRS 16, paragraph:40-43

ifrs16.pdf,page: 17, 18

Example
A company operating with inflation economy has signed 10 year agreement with yearly lease payments of CU 50,000, paid at the starting of each year. Every 2years, lease payments will be reevaluated according to in the Consumer Price Index for the preceding 24 months. At the starting of the date, CPI was 125. At the starting of the 3.year CPI is 135.

When is the lease liability reevaluated?

On first measurement, the lease obligation is calculated on the contractual lease payments of CU 50,000 p.a. When the CPI may change the company could not recalculate its lease obligation before the starting of the 3.year because until then the change in CPI has not result in a change in cash flows. At the starting of the 3.year, the lease obligation would be adjusted as the contractual cash flows is changed.

How is the lease obligation reassessed?

The revised measurement of the lease obligation is at the present value of the revised payments, based on the CPI at the date of change for the rest of the term using the unchanged discount rate (that is CU 50,000 × 135 / 125 = CU 54,000).

Resources: In depth, A look at current financial reporting issues, IFRS 16-a new era of lease accounting, PWC, https://www.pwc.com/pg/en/publications/ifrs-news/in-depth-ifrs16.pdf, page:18

3.1.3.4. Subsequent Measurement Of The Right-Of-Use Asset

The right-of-use assets is measured at cost deducted accumulated amortization and accumulated losses of impairment.[127] When book value has decreased to zero, lessees edit the book value of the right-of-use asset for re-measurement of the lease obligation.[128]

These are cost model. A lessee can also use other measurement models. If fair value model is used for investment property according to TAS 40 Investment Property, fair value method is applied for assets which have rights to use that correspond the description of investment property by tenant. Lessee may also use revaluation model for right of use of asset which relates to plant, property and equipment according to TAS 16.

[127] IFRS 16, paragraph:30
[128] IFRS 16, paragraph:39

3.1.3.4.1. Measurement Basis

After the commencement date, the right of use asset is measured at its cost deducted any accumulated depreciation and any accumulated impairment losses and adjusted for any re-measurement of the lease liability.

Lessee can apply alternative methods of measurement in two cases:

i. If the fair value method is applied to investment properties for TAS 40, the fair value method is applied to assets which have rights to use that correspond the description of investment property for TAS 40.
ii. When the assets which have rights to use are related to a category of plant, machinery and equipment to where the revaluation method in TAS 16, a revaluation method can be applied to all of the assets that associated with plant, machinery and equipment class.

3.1.3.4.2. Amortization Of The Right-Of-Use Asset

For amortization of right of use assets, TAS 16 is considered.[129] Depreciation starts at the commencement date.

The amortized term for the asset is as following:[130]

- if possession of the asset is transmitted to the tenant , or if the tenant is reasonably certain to use a purchase option, the underlying asset is amortized from the date of the lease was actually started to the till the last of the useful life of the related asset

- If there is no transfer of ownership, the amortization period continues until the following periods are earlier than:

-the date on which the useful life of the asset that have right to use expires or the date on which the lease expires.

[129] IFRS 16, paragraph:31
130IFRS 16, paragraph:32

3.1.3.4.3. Impairment Of The Right-Of-Use Asset

Impairment and impairment loss related to right of use asset is accounted according to TAS 36 "*Impairment of Assets"*.[131]

The adoption of TFRS 16 may have a significant impact on the amount of assets recorded in the statement of financial position and, therefore, on the carrying value of assets tested for impairment. The right-of-use-asset is tested for impairment, when impairment indicators exist. Even if there are no impairment indicators at the right-of-use-asset level or the respective CGU level, right-of-use-assets affect the annual goodwill impairment test by increasing the carrying amount of the CGU, or group of CGUs, at which goodwill is assessed for impairment.[132]

3.1.3.5. Presentation

A lessees shall present their leases on their balance sheet otherwise, lessee shall explain in notes to the financial statements.

3.1.3.5.1. Presentation of Right of Use Asset and Lease Liabilities

The lessee presents right of use asset separately from other assets and the lessee also presents the lease liability separately from other liabilities.

If the lessee does not present separately in the balance sheet, lessee should[133]:

- shall include right-of-use assets in the account to which they are to be presented, if the underlying assets to which these assets are related are presented

- explains items in the balance sheet contain these right-of-use asset

Lease liabilities are presented in the statement of financial position individually from another liabilities. In the event that the lease liabilities are not presented in the statement of financial position separately from other liabilities, it is explained which items in the balance

[131] IFRS 16, paragraph:33
[132] E&Y, Applying IFRS, impairment Considerations for the new leasing standard, November 2018, page:4
[133] IFRS 16, paragraph:47

sheet contain those liabilities.[134]

Assets that have right to use that correspond the description of investment property are shown as investment property in the balance sheet.[135]

3.1.3.5.2. Presentation Of Lease Payments In Profit/Loss

The lessee presents interest expenditures related to lease liabilities separately from the depreciation charge of the right of use asset. If not, lessee presents interest expenditures as finance costs elements.

3.1.3.5.3. Presentation Of Lease Payments In Cash Flow Statement

The lessee classifies 12 months or less lease payments, leases of low-value assets and variable lease payments that are not included in the measurement of the lease liability within operating activities. Cash payments related to principal and interest of the lease obligation is categorized financing activities in accordance with TAS 7 *"Statement of Cash Flow"*.

3.1.3.6. Special Lease Topics

TFRS 16 includes specific guidance about some special topics.

3.1.3.6.1. Sale-And-Leaseback Transactions

The company (the seller – lessee) transfers an underlying asset to another company (the buyer – lessor) and leaseback this asset from the buyer – lessor. [136]

TFRS 16 focuses on the sale part; whether there is a sale which meets the conditions defined in TFRS 15 or not.

The company shall first perform TFRS 15 to decide a sale has actualized or not. If there is a sale ("transfer of control") which meets the criteria of TFRS 15, the transaction is recognized on-balance sheet at cost performing the general requirements of TFRS 16. If this is not the case, there is no transfer of control, then there is no sale and leaseback transaction under

[134] IFRS 16, paragraph:47
[135] IFRS 16, paragraph:48
[136] IFRS 16, paragraph:98

TFRS 16 and the asset and financial liability is recognized according to TFRS 9 for received amounts.

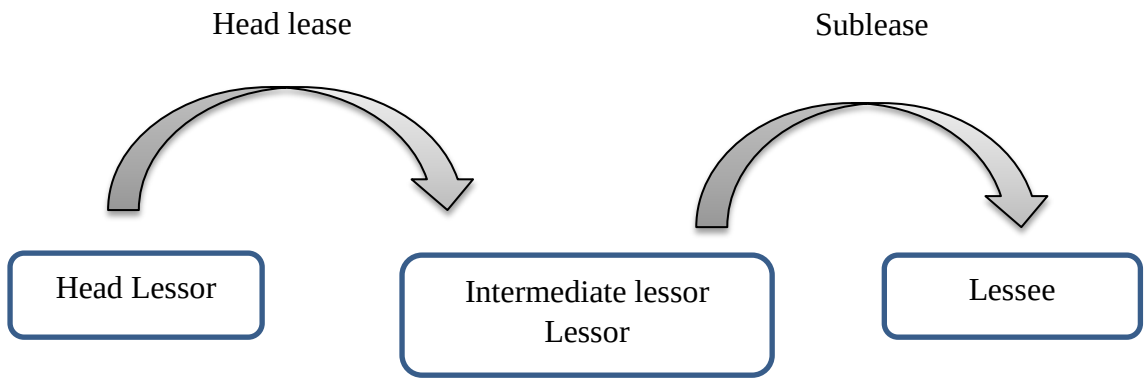
The lessor would not take asset to financial statements and would take into a financial asset according to TFRS 9 for amounts transferred to the company and it recognize the transaction under TFRS 9.[137] From the buyer-lessor perspective, the process is exactly the same.

3.1.3.6.2. Sub-Leases

Where an original lease ("the head lease) is sub-leased to a sub-lessee, the original lessee becomes an intermediate lessor. Main lease and the sub-lease are accounted as two distinct agreements by the intermediate lessor.

The intermediate lessor categorize the sub-lease according to finance or operating based on the right of use asset originated from the main lease. There is a greater chance that the sublease will be typically classified as finance lease.[138] The intermediate lessor recognizes both income from lease transaction and expense from lease transaction as gross if it is not as an agent.

Figure 6: Sub-leases under TFRS 16



If a lessee leases an asset in the scope of subleases, or if the asset is expected to be leased in the sublease, the main lease cannot be considered as low-value asset. [139]

[137] IFRS 16, paragraph:103
[138] IFRS 16, paragraph B58
[139] IFRS 16, paragraph B7

3.1.3.6.3. Investment Property

In the event that the right to use assets meets the requirement of investment property, the lessee applies the disclosure requirements according to TAS 40. In accordance with TAS 40, the company chooses the fair value model or cost model as the accounting policy to measure its investment property and applies this method to its all investment properties and applies the same method to all investment properties owned and leased.[140]

Lessee cannot treat the asset that have right to use as a separate class within the investment property portfolio (the right of use asset must be accounted for as all other investment property either at cost or fair value; but it does not cost for some investment property and fair value for investment property). [141]

3.1.3.6.4. Modifications to Lease

According to TFRS 16; *"A lease modification is a change in the scope of a lease, or the consideration for a lease that was not part of the original terms and conditions of the lease for example adding or terminating the right to use one or more underlying assets or extending or shortening the contractual lease term."*[142]

3.1.3.6.4.1. Lessee

There is two considerations for lessee related to accounting as separate lease or not these lease modification.

A lessee would consider for a change in the lease as a distinct lease, if both of the following situations exist:[143]

a) to extend the extent of the lease by putting the right of use of one or more asset to the change;

b) consider lease as a distinct lease in case the expansion in the scope increases in

[140]IFRS 16, paragraph 34
[141]IFRS 16, Measurement after recognition, Accounting Policy, paragraph:30
[142] IFRS 16, Defined Terms
[143]IFRS 16, paragraph:44

proportion to the standalone price alone and the appropriate adjustments are made at the price in order to reflect the terms of the contract.

The lessee has not recognized as a separate lease in respect of modifications:[144]

a) For lease alterations that narrow the extent of the lease, the lessee lowers the book value of the asset that have right to use to represents not totally or complete at the end of the lease, and it accounts a gain or loss in profit or loss

b) The lessee adjust an appropriately for all other modifications in the right-of-use asset.

3.1.3.6.4.2. Lessor –Finance Lease Alterations

Alteration to a finance leases shall be accounted as a distinct lease by lessor when both of situations below are correspond:[145]

a) The extend of the lease by putting in the right of use of one or more assets to the change

b) The lease amount shall be increased in proportion to the price of extension alone and in accordance with proper adjustments are made at the price in order to represent the terms of the agreement

The lessor considers for an alteration to a finance lease below, if the alteration is not a distinct lease:[146]

a) if the alteration had been effective on the inception date of the lease and the lease is categorized as operating lease, then the lessor shall do these:

- the lease modification is recognized as a new leasing from the date of application of the modification

- the book value of the asset is measured as the net investment in the original lease

[144]IFRS 16, paragraph:46
[145]IFRS 16, paragraph:79
[146]IFRS 16, paragraph:80

before lease modification becomes effective.

b) In other cases, it is applied TFRS 9 requirements.

3.1.3.6.4.3. Lessor –Operating Lease Alterations

A lessor shall account alterations to an operating lease as a new lease from the date of application of the alterations, taking into account any rent payments that have been previously paid or accumulated lease obligations in relation to the main lease in the context of the lease obligation related to the new lease.[147]

3.1.3.6.5. Intercompany Leases-Consolidation Effects

While intercompany leases is eliminated for consolidated reporting, some companies may prepare standalone financial statements. The recognizing an asset that have right to use and a liability generated from leasing in the standalone financial statements implementation of the new lease accounting model may impact investors or other shareholders. According to TFRS 16, a lessee may select not to apply leasing model for leases with a period less than 12 months ("short-term exemption") based on underlying asset class. The standard also stipulates that leases between related parties should be accounted based on the enforceable terms and conditions of the lease.

For many companies, lease agreement parent company or another member of the consolidated group under related to use of a floor in the building, equipment, and maintenance is common. These kinds of agreements may contain a lease. But, if the legally-enforceable term of such agreement is 12 months or less, the lessee entity may select the short-term exemption and not reflect a right-of use asset and a lease liability on its balance sheet.[148]

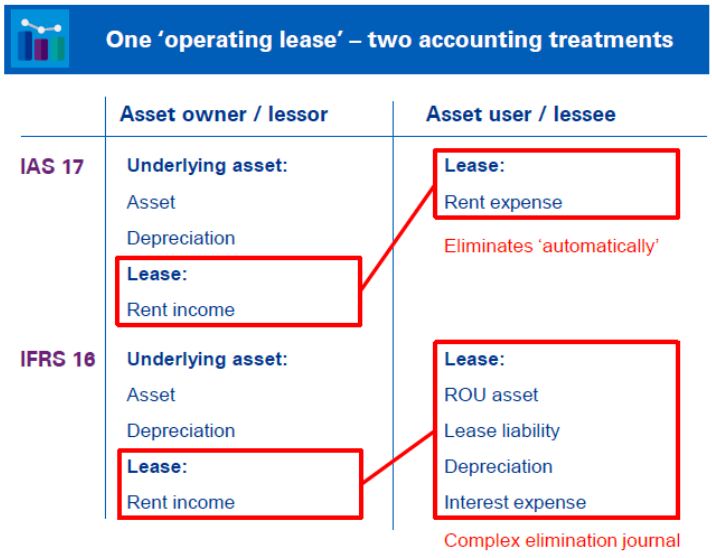
As shown below, According to TFRS 16, inter-company leases will not be eliminated directly. Lease contracts between the group companies, which were previously classified as operating leases by both the lessee and the lessor, can no longer take equal and opposite accounting in the accounts of each group of companies. While lessor will continue to apply the

[147] IFRS 16, paragraph:87

[148] In depth, A look at current financial reposting issues, The leases standard, A summary of the new model and its potential impact, PWC, page :4

operating lease accounting, lessee recognize right to use and the liability generated from leasing to the financial statements. This increase the complexity of group reporting, systems and processes.[149]

Figure 7: Intercompany leases (intra-group transactions)



Resource: KPMG,https://home.kpmg/content/dam/kpmg/xx/pdf/2018/05/ifrs-today02-intercompany-leases-onepager.pdf , 24.03.2019

3.1.3.6.6. Deferred Tax Effects

Because of all leases will be recognized as right of use asset and lease liabilities after the implementation of TFRS 16, differences will be raised. The difference will be due to the fact that the right to use and the amount of the lease liability will not decrease in the same way in time and they will not be reported in equal amounts. Therefore, at initial recognition, if the asset that have right to use is an equivalent to the liability generated from leases, deferred tax shall not be generated.

Although the right of use asset at the end of the reporting period is depreciated by the straight-line method, as the lease payments will be differentiated as principal and interest payments, the equality between them will not be continued over time and deferred tax

[149]Accounting for leases is changing, what's the impact on consumer market and retail companies?, KPMG, May 2018, http://www.kpmg.com.pg/images/accounting_for_leases.pdf

calculation will be required.

3.1.3.7. Accounting for lessor

Accounting for lessors is similar to IAS 17 regarding lease classification as operating and finance lease.[150] But, there is some detailed guidance about the lease definition, sale and leaseback, sub-lease, recognizing for lease modifications and disclosure requirements in terms of lessors. This shows that there is no symmetry between lessee and lessor accounting model.

Lessor classifies its leases, and then accounts it regarding as operating and finance lease. It is classified as finance lease if it substantially transfers all risks and benefits arising from the possession of the underlying asset and all other leasing transactions are operating leases.[151]

3.1.3.8. Disclosures to the financial statements

The purpose of the disclosures made by lessee and lessors is the disclosure of the information that will form a basis for the evaluation of the effects of the leases on the statement of financial position, statement of profit or loss and cash flows of the lessee and lessor by the users of the financial.[152]

3.1.3.8.1. General Disclosures

Lessees and lessors shall explain the basis for the users of financial statements to evaluate the effects on statement of financial position, statement of profit or loss and cash flows of the lease.[153]

3.1.3.8.2. Disclosures For Lessee

Table 4
Disclosures for Lessee

Right-of-use asset
Amortization (according to asset class)

[151] IFRS 16, paragraph:62
[151] IFRS 16, paragraph:62
[152]IFRS 16, paragraph:51,89
[153] KPMG, A more transparent balance sheet, First Impressions, , January 2016, https://assets.kpmg/content/dam/kpmg/pdf/2016/01/leases-first-impressions-2016.pdf ,page:45

Carrying amount (according to asset class)
Additions
Lease obligations
Interest expenditures
Expiry analysis
Exemptions for recognition and measurement
12 months or less expenses
Leases of low-value assets expenses
disclosures for profit/loss table
Changeable lease obligations that not contained in lease liabilities expenses
Sublease of assets that have right to use income
Gains or losses generated from sale and leaseback operations
Total cash outflow for leases
Future cash outflows from …
Changeable lease payments (included key factors on those payments and impacts)
Extra time and ending choices
Residual value guarantees
Leases where the company is committed not yet started
Commitments for short-term lease
Qualitative disclosures
Inherent of the tenant's rental operations
Limitations or conditions brought by leases
Sale and leaseback operations

Resources: In depth, A look at current financial reporting issues, IFRS 16-a new era *of lease accounting, PWC, https://www.pwc.com/pg/en/publications/ifrs-news/in-depth-ifrs16.pdf, page: 31*

According to TFRS 16, a lessee shall disclose these as tabular form unless another format is more appropriate.[154]

If right of use asset fulfils the required description of investment property, explanations in TAS 40 shall apply. If assets that have right to use is measured at re-appraisal amounts by implementing TAS 16, the information in TAS 16 is disclosed.[155]

Many lease arrangements may contain complex specifications such as termination options, extension options and residual value guarantees. These are often company specific situations, so TFRS 16 indicates to explain information that is important to reach the explanation purpose and to correspond the request of readers of financial statements. [156]

[154] IFRS 16, paragraph:54
[155] IFRS 16, paragraph:56,57
[156] IFRS 16, paragraph:BC224

3.1.3.8.3. Disclosures For Lessor

According to TFRS 16, a lessor presents these in tabular form except when another form is more suitable.[157]

Lessor make explanation according to its lease classification as finance lease and operating lease.

Table 5
Disclosures for lessor

Finance Lease
Selling profit or loss
Finance income on the net investment
Income related to changeable lease payments
Qualitative and quantitative disclosure of the changes in net investment
Maturity analysis for lease receivable
Operating lease
Lease income, individually disclosed related to changeable lease obligations
Maturity analysis for lease payments
Disclosure required for in IAS 36, IAS 38, IAS 40 and IAS 41 for operating
Disclosure required for in IAS 16 for property, plant and equipment items to an operating lease
Qualitative explanations
Lessor's leasing activities nature
Risk management related with rights that retained for assets

Resources: In depth, A look at current financial reporting issues, IFRS 16-a new era of lease accounting, PWC, https://www.pwc.com/pg/en/publications/ifrs-news/in-depth-ifrs16.pdf,page: 32

3.1.3.8.4. Comparison of TAS 17 And TFRS 16 Disclosures

Disclosure requirements for the lessee in TFRS 16 is detailed compared to TAS 17.

Lessee disclosures

Table 6
Disclosure Requirement between TAS 17 and TFRS 16

[157] IFRS 16, paragraph:91

TFRS 16	TAS 17
Additions to right of use assets	General requirements under TAS 16 Property, Plant and Equipment
Carrying amount of right-of-use assets by class of underlying asset	Required under TAS 17
Depreciation expense Interest expense Expedients for lease period less than 12 months Expedients for assets are low-value Changeable lease obligations excluded from lease liabilities	General requirements under TAS 16 Property, Plant and Equipment
Maturity analysis of lease liabilities	General requirements under TFRS 7
Losses or gains generating from sale and leaseback operations	Not required under TAS 17
Income from subleasing right-of-use assets	Not required under TAS 17
Total cash out flows for leases	Required under TAS 7
Commitments for short-term leases	Not applicable

3.1.3.9. Effective Date And Transition to New Standard

3.1.3.9.1. Effective Date

TFRS 16 is applicable for annual periods beginning on or after 1 January 2019. It can be applied early for entities applying revenue standard TFRS 15 on or before the first application date of TFRS 15.

3.1.3.9.2. Lease Definition On Transition

Companies may select to implement the description of new leases to all agreements or not to reassess whether an agreement is a rental agreement or includes a lease on the date of first application.[158]

Instead; Previously IAS17 and IFRIC 4 applying the lease is defined as the agreements applicable to this Standard. Contracts that are not defined as a contract that includes a lease by applying TAS 17 and IFRIC 4 may not apply to this Standard. It may also apply the definition of a lease in TFRS 16 to assess whether the contracts entered after the first application date of

[158] IFRS 16, paragraph:C3

the new standard are leases.

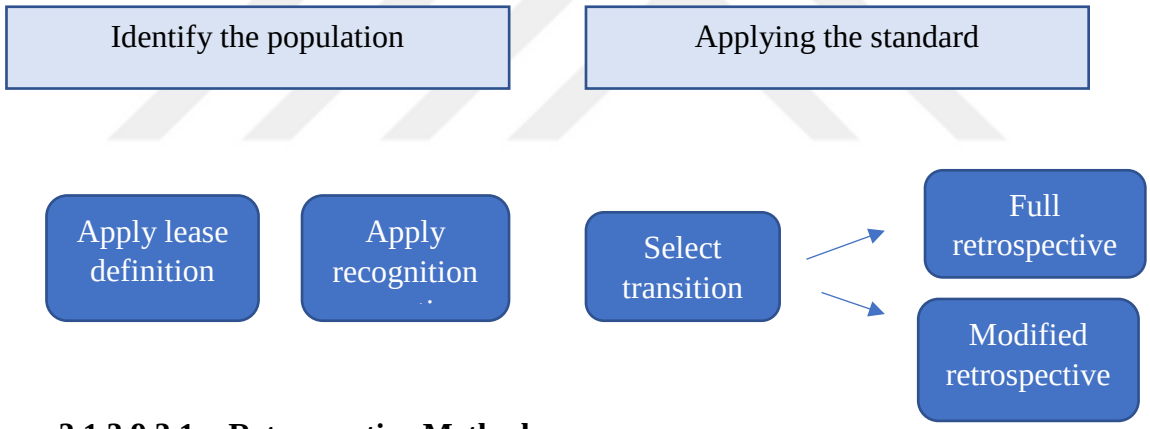
The first implementation date is the beginning of the yearly accounting term for the company implements TFRS 16 for the first time.[159]

If these practical expedients are preferred, this is explained in the notes to the financial statements and it is applied to all agreements.

3.1.3.9.3. Lessee Approach To Transition

There are two transition option for lessees as retrospectively or modified retrospectively.[160] Lessee applies transition method steady to all leases where its position is as lessee.[161]

Figure 8: Lessee approach to transition



3.1.3.9.3.1. Retrospective Method

If the lessee prefers this approach, the lessee restates the comparative information. The lessee reflects the impact of the initial implementation of this standard in the financial statements as a correction in the beginning balance of the retained earnings (or other appropriate equity component) at the date of the first application.[162]

[159] IFRS 16, paragraph:C2
[160] IFRS 16, paragraph:C5
[161] IFRS 16, paragraph:C6
[162] IFRS 16, paragraph:C7

Leases that were categorized as operating leases according to TAS 17, lessee will:[163]

a) recognize a lease obligation which measure at the present value of the residual lease payments, discounted using the tenant's incremental indebtedness rate at the date of first implementation at the date of the first implementation.

b) recognize an asset that have right to use at the date of the first implementation that select on the basis of each lease according to its book value as if the new standard is implemented since the beginning of date, but made a discount by using the lessee's incremental borrowing rate at the first implementation date or amount same the lease liability, or re-measured by the amount of paid before or accrued lease obligations relevant to that lease accounted in the balance sheet before the date of first implementation.

Also, lessees do not need to make adjustments for low value items and do not need to adjust transition for leases initially recognized as investment property selecting the fair value method according to TAS 40 Investment Property. Lessee evaluate the right-of-use asset on fair value at the date of first implementation for leases which was recognized as operating leases implementing TAS 17 and that shall be recognized as investment property using the fair value method according to TAS 40 from the date of first implementation .[164]

Leases that were categorized as finance leases according to TAS 17:

a) carrying amount of the right-of-use asset and the liability for lease at the date of first application is the carrying amount of the lease asset and liability measured in accordance with TAS 17 before the first application date .

b) the right of use and lease obligations for these leases are recognized by implementing TFRS 16 from the date of first implementation.

3.1.3.9.3.2. Modified Retrospective Method–Practical Exemptions For Operational Leases

[163]IFRS 16, paragraph:C8
[164]IFRS 16, paragraph:C9

There are some practical exemptions for retrospective method as follows:[165]

a) lessee can identify a only one discount rate for leases portfolio with modest level similar features like same period or same economic environment

b) lessee can rely on evaluation of made by performing TAS 37 before the date of the first implementation as to whether leases are onerous as an alternative to reviewing of impairment

c) lessee may not prefer to apply lease period to the lease agreement which has less than 12 months term of first implementation

d) lessee may not include beginning direct expenditures in the accounted of the asset that have right to use at the date of beginning implementation

e) lessee can use information learned after the relevant past period, if the agreement includes choices to extend or end the lease such as lease period

3.1.3.9.4. Approach for Lessor Transition

For leases other than sub-leases and sale-and-leaseback operations, lessor does not need to make any adjustments for transition. Instead of these, a lessor should recognize for such leases by implementing TFRS 16 from the date of first implementation.[166]

3.1.3.9.5. Sub-Leases On Transition

In accordance with previous standard, each sub-lease classified as operating leases is reclassified to be classified as operating leases or finance leases according to this standard. Under the sub-lease, the lessor should make this evaluation on the date of the first implementation in accordance with the contractual period and situations of the main lease and of the sub-lease. Sub-leases, which are categorized as operating leases in accordance with previous standard but are leases regarding this Standard, is accounted for as a new leases at the

[165]IFRS 16, paragraph:C10
[166]IFRS 16, paragraph:C14

date of beginning implementation.[167]

3.1.3.9.6. Sale-And-Leaseback On Transition

A seller-lessees do not reevaluate sale-and-leaseback operations made prior to the first application date in order to determine whether the transfer of the underlying asset meets the requirements of TFRS 15 for sale transaction.[168]

Sale-and-leaseback operations are accounted for as a sale and finance lease according to TAS 17, the seller-lessee:[169]

i. Recognize leaseback in the same manner as it recognizes other finance lease available at the date of first implementation

ii. During the lease period, gain on the sale should be amortized.

Sale-and-leaseback operations that are recognized for as a sale and operational lease for TAS 17, the seller-lessee:[170]

i. Recognize the leaseback as it recognizes other operating lease available at the date of beginning implementation

ii. edit asset that have right to use subject to the leaseback to all postponed gains or losses that regarding non-market conditions reflected in the balance sheet prior to the date of beginning implementation .

3.2. Comparison With Previous standard

TFRS 16 is compared with previous standard.

Table 7
Comparison of TFRS 16 with Previous Standard

Topic	IFRS 16	Previous standard

[167]IFRS 16, paragraph:C15
[168]IFRS 16, paragraph:C16
[169]IFRS 16, paragraph:C17
[170]IFRS 16, paragraph:C18

Lease definition	*"An agreement, or piece of an agreement, that conveys the right to use an asset (the underlying asset) for a term of time or amount of use in exchange for consideration"*[171] Lessee has the right to obtain substantially all of the economic benefits from use of asset and the right to direct the use of the asset.	According to TAS 17 Lease is defined as; *"An agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed term of time"*[172] According to IFRIC 4 "*Determining whether an Arrangement contains a Lease"*, it does not need carry the right to control for using of asset.
Distinction of lease elements	Distinct element, if: • distinct benefit for lessee, •independent or highly related with each other elements	There is no special guide
Combination of agreements	Put together agreements if they meet specific conditions	No detailed guide
Practical expedients	**TFRS 16**	**TAS 17/IFRIC 4**
Short-term lease	Lessee may choose not to implement TFRS 16 to these 12 months or less term leases which are not included purchase option. These are accounted as expense straight-line basis during the lease term.	inapplicable
Low values assets	Lessee can choose not to implement the new standard for leases of low value assets. These are accounted as expenditures linear basis as long as the lease period.	inapplicable

Lessee Accounting		
Classifications	No classifications and asset that have right to use and lease obligation for whole lease.	Lease is categorized as a finance lease when the all the risks and returns generated from possession is transmitted to a large extent. In other case, a lease is an operational lease.
Measuring		

[171] IFRS 16, Defined Terms
[172] IAS 17, Defined Terms

Initial measuring of lease liability	At the commencement date, (apart from 12 months or less term and assets that have low value) lease obligation is measured on the present value of the lease obligation in terms of lease period. Lease obligations ; a) unchangeable payments b) variable lease payments c) guarantees related to residual value d) Choice for buying e) Strike fee and payments for terminating.	At the beginning of the lease period, lessees account finance leases as assets and liabilities in balance sheet at amounts equivalent to the fair value of the leased real estate or, if lower the present value of the minimum lease payments that decided at the beginning of the lease . Liabilities are not considered measurement of operating leases for the beginning.
Re-evaluation of lease liability	After the beginning date, lessees reevaluate the lease obligation when there alterations are measured as a distinct agreement in below: a) lease period b) evaluation of the tenant is almost certain to strike a choice to purchase the asset c) expectable payable amounts related to guarantees for residual value d) future lease obligations that are generated from an index or rate alterations.	inapplicable
Asset that have right to use	Asset that have right to use comprised of: (a) Lease obligation (b) obligations at or before the beginning date of lease, deduct lease incentives obtained (c) beginning direct costs	Assets are not recognized measurement of operating leases for the beginning.
Assets that have right to use measured at different than cost model	When the fair value method is implemented in TAS 40 for investment property, regarding the TFRS 16, the fair value method is implemented to assets that have right to use that fulfill the description of	Properties are recognized as investment property if it is measured regarding TAS 40.

	investment property.	
Lease Alterations		
Lease alterations to an operational lease - lessors	Lessors recognize an alterations for an operating lease as a new lease when alterations become effective by taking into consideration any payment paid before or accumulated lease obligations connected to main lease as a piece of the lease obligations for the new lease.	inapplicable
Lease alterations that is not considered as new distinct leases – for lessees and lessors	For lessees: (a) assign the cost in the altered agreement (b) decide the lease period of the altered leases (c) re-measure the lease obligation by making reduction the edited lease obligations using a edited discount rate with adjustment to asset that have right to use Lessee accounts in profit or loss about the part of or whole ending of the lease. For lessors: If a leasing is an operating lease, had the alteration is effective at the beginning date, lessors consider below for a finance lease: (i) alteration is recognized as a new lease (ii) recognize book value of the asset as the net investment before the validity date of the alteration. Or else, the alteration is recognized according to TFRS 9 Financial Instruments.	inapplicable
Presentation		
Statement of financial position	Asset that have right to use and lease obligation are presented for each lease individually apart from another assets and liabilities. If a lessees select to present right of use assets individually, the lessee will add assets that have right to use where the assets will be shown when they own of it and explain which line items in the balance sheet contain	Operating lease: Asset or liability is not recognized Finance lease: Leased asset and leased liability

	those assets. If lease obligation is not presented individually, lessee will explain which line items contain these liabilities in the balance sheet.	
Profit/Loss table	Only one method a) Asset that have right to use: amortization b) Lease obligation: effective interest rate c) Changeable lease payments do not contain in lease obligation	Operational lease: Lease payments are made on linear basis Finance lease: Leased asset: amortization Lease liability: effective interest rate Variable lease payments are not included in lease liability
Statement of cash flows	Piece of lease payment that reflects main amount: Cash flow arising from financing activities Piece of lease payment that reflects interest amount : operating cash flow or cash flow arising financing activities Payments less than 12 months leases, for lease of low-value assets and changeable lease payments not contained in lease liability	Operating lease: Operating cash flow Finance lease: Like TFRS 16
Sale and leaseback operations	Pursuant to transfer is sale or not	Pursuant to categorization of leaseback
Disclosures for lessee and lessor	Detailed disclosures including the format of disclosure	Less disclosures rather than TFRS 16
Lessor Accounting		
Statement of financial position	Categorization as finance lease or operational lease Finance lease: derecognition of the asset, accounting of a lease receivable at amount equivalent to the net investment in the lease	
Profit/Loss Table	Finance lease: interest recognized based on effective interest rate Operational lease: lease payments on linear basis	
Sub-rental	categorization of sub-rental treats to right of use asset	categorization of sub-rental to leased asset
Alterations	Correction of existing lease, or recognized for as a distinct lease, connected alteration kind	No detailed guide
Sale and leaseback	Depends on transfer is sale or not	Depends on categorization of leasebacks

4. ANALYSIS OF THE NEW STANDARD'S IMPACT ON PUBLICLY-LISTED COMPANIES IN TURKEY

4.1. Objective of the study

New lease standard has been effective as at 1 January 2019 and it eliminates different accounting approaches for financial leases and operating leases, so it includes all lease agreements in the financial statements.

The aim of this thesis is to analyze how the new leases standard affect the financial statements of Turkish companies listed on the BIST 100 Index after the initial application of this new standard (TFRS 16). and identify similarities and differences in terms of lessee regarding the recognition, measurement presentation and disclosures in comparison with previous lease standard (IAS 17). There is no enough study on the effects of applying TFRS 16 on the companies since a few listed companies have applied to TFRS 16 early than 2019. Thus, this thesis aims to contribute to Turkish Literature related to first adoption of TFRS 16's impact on the company's financial statements which are on BIST 100 Index.

The basic assumption of the analysis is that the assets and liabilities of the lessee companies that obtain the right of use of their assets through operating leases will increase in the financial statements and this increase will significantly change the performance indicators of the lessees.

4.2. Literature Review

According to Imhoff and Thomas, as a result of capitalization of lease for companies operating in the USA, there will be a decrease in its financial leases compared to operating leases. In addition, the share of total leasing agreements in the capitalization of related financial leasing liabilities and other financial liabilities decreased and the total indebtedness level decreased when compared to the equity.[173] Duke and others has analyzed the impact of lease

[173] Imhoff, E. A. ve J. K. Thomas. 1988. "Economic Consequences of Accounting Standards: The Lease Disclosure Rule Change", Journal of Accounting and Economics, page: 277-310.

capitalization on five financial ratio of the selected companies. In their studies, the recognition of the leases as operating leases rather than finance lease has indicated that it could significantly improve significant financial ratios of companies such as Debt to Equity (D/E), Current Ratio, Return on Asset (ROA) and interest and rent expense coverage for firms their income would have been decreased had their operating leases been recognized as capital leases.[174] There is similar study about the impact of lease capitalization for Australian companies. Similar findings with Duke, the increase in D/E ratio. But in differently, Duke stated that decreases in ROA results in companies' income, so it would have been reduced had their operating leases been reported as capital leases. Also, this leads to increase in ROA for companies which their income would have been increased under lease capitalization.[175]

Another recent study about the effect of new standard, as long as the current structure of the rental agreements is maintained, there will be no change in the basic financial ratios. But in other cases; ROA and ROE will increase. In addition, it was concluded that the effect of operating lease agreements could be maintained at a reasonable level by decreasing the rental periods.[176] Another study states that the factors affecting the operating leases of companies are the value of fixed asset, growth level and firm size. If the entity can not able to base operational leasing activities on economic determinants, then it has been decided that companies should move to operating leases by excluding their leases from the financial statements in order to hide the company's borrowings. In the same study, they stated that the company's financial ratios is affected from the capitalization of the operating leases significantly agreed with Lückerath and Boss's study about the effect of capitalization of operating leases on financial ratios.[177] According to Lückerath and Boss's, when the operating lease was included in the financial statements, the companies' leverage ratios would be seriously affected while the profitability ratios will be less effective.

In addition, the fact that the operating lease is not included in the financial statements, particularly in terms of companies that do not rent, they stated that it would affect the level of

[174] Joanne C. Duke, Su-Jane Hsieh, Yuli Su, Operating and synthetic leases: Exploiting financial benefits in the post-Enron era, Advances in Accounting, incorporating Advances in International Accounting 25 (2009) 28–39.
[175] Karen Wong, Mahesh Joshi, The Impact of Lease Capitalisation on Financial Statements and Key Ratios: Evidence from Australia, Australasian Accounting, Business and Finance Journal, 2015.
[176] Begoña Giner, Paloma Merello, Francisca Pardo, Assessing the impact of operating lease capitalization with dynamic Monte Carlo simulation, Journal of Business Research, 24 November 2018, Sciencedirect, 10 May 2019
[177]Nunung Nuryania, Tan Thing Hengb, Nadya Juliestaa, Capitalization of Operating Lease and Its Impact on Firm's Financial Ratios, 2nd Global Conference on Business and Social Science-2015, GCBSS-2015, 17-18 September 2015, Bali, Indonesia, Sciendirect, 10 May 2019

comparability.[178]

4.3.Data and Methodology

Assumptions

The basic assumption of the study is that the assets and liabilities of the lessee companies that obtain the right of use their assets through operating leases will increase in the financial statements and this increase will significantly change the performance indicators of the lessees.

Data

The analysis is performed by examining the financial statements and the related footnotes and explanatory information of the 100 publicly traded companies in the BIST 100 index as of 31 March 2019, 31 December 2018. Financial reports and annual reports for this thesis is obtained from KAP (Public Disclosure Platform) website. Interim consolidated and unconsolidated financial statements and annual reports are obtained for each company then they are moved to excel program for analyses. The sample consists of companies that are listed on BIST 100 Index included of 100 companies for 2019.

The list of companies that are quoted in BIST 100 index as of 31 March 2019 and their IFRS 16 adoption status is presented in Table 8 below:

Table 8
List of Companies in BIST 100 Index According to TFRS 16 Adoption

Company Code	Company	TFRS 16 Adoption
AFYON	AFYON ÇİMENTO SANAYİ T.A.Ş.	✓
AKBNK	AKBANK T.A.Ş.	✓
AKSA	AKSA AKRİLİK KİMYA SANAYİİ A.Ş.	✓
AKSEN	AKSA ENERJİ ÜRETİM A.Ş.	✓
ALGYO	ALARKO GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	disclosed that the level of impact is insignificant
ALARK	ALARKO HOLDİNG A.Ş.	✓
ALBRK	ALBARAKA TÜRK KATILIM BANKASI A.Ş.	✓

[178]Lückerath, M., & Bos, A. d.), An Extensive Comparison of Operating-Lease Capitalisation Approaches and Their Unavoidable Assumptions. Working paper. Rotterdam, The Netherlands: Erasmus University, 2009.

ANACM	ANADOLU CAM SANAYİİ A.Ş.	✓
AEFES	ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş.	✓
ARCLK	ARÇELİK A.Ş.	✓
ASELS	ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.	have declared to started new standard but have not made any disclosure about transition
BERA	BERA HOLDİNG A.Ş.	disclosed that the level of impact is insignificant
BJKAS	BEŞİKTAŞ FUTBOL YATIRIMLARI SANAYİ VE TİCARET A.Ş.	special reporting period other than ended 31 March
BIMAS	BİM BİRLEŞİK MAĞAZALAR A.Ş.	✓
CCOLA	COCA-COLA İÇECEK A.Ş.	elect retrospective approach for transition
CLEBI	ÇELEBİ HAVA SERVİSİ A.Ş.	✓
CEMAS	ÇEMAŞ DÖKÜM SANAYİ A.Ş.	have not disclosed any information
CEMTS	ÇEMTAŞ ÇELİK MAKİNA SANAYİ VE TİCARET A.Ş.	disclosed that are in the progress of assessing
DOHOL	DOĞAN ŞİRKETLER GRUBU HOLDİNG A.Ş.	✓
DGKLB	DOĞTAŞ KELEBEK MOBİLYA SANAYİ VE TİCARET A.Ş.	✓
EGEEN	EGE ENDÜSTRİ VE TİCARET A.Ş.	have not disclosed any information
ECILC	EİS ECZACIBAŞI İLAÇ, SINAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş.	✓
EKGYO	EMLAK KONUT GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	disclosed that the level of impact is insignificant
ENJSA	ENERJİSA ENERJİ A.Ş.	✓
ENKAI	ENKA İNŞAAT VE SANAYİ A.Ş.	disclosed that the level of impact is insignificant
EREGL	EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.	✓
FENER	FENERBAHÇE FUTBOL A.Ş.	special reporting period other than ended 31 March
FROTO	FORD OTOMOTİV SANAYİ A.Ş.	✓
GSRAY	GALATASARAY SPORTİF SINAİ VE TİCARİ YATIRIMLAR A.Ş.	special reporting period other than ended 31 March

GENTS	GENTAŞ GENEL METAL SANAYİ VE TİCARET A.Ş.	have not disclosed any information
GEREL	GERSAN ELEKTRİK TİCARET VE SANAYİ A.Ş.	disclosed that are in the progress of assessing
GLYHO	GLOBAL YATIRIM HOLDİNG A.Ş.	✓
GOODY	GOODYEAR LASTİKLERİ T.A.Ş.	✓
GOLTS	GÖLTAŞ GÖLLER BÖLGESİ ÇİMENTO SANAYİ VE TİCARET A.Ş.	disclosed that are in the progress of assessing
GOZDE	GÖZDE GİRİŞİM SERMAYESİ YATIRIM ORTAKLIĞI A.Ş.	Disclosed that the level of impact is insignificant
GSDHO	GSD HOLDİNG A.Ş.	✓
GUBRF	GÜBRE FABRİKALARI T.A.Ş.	have not disclosed any information
SAHOL	HACI ÖMER SABANCI HOLDİNG A.Ş.	✓
HEKTS	HEKTAŞ TİCARET T.A.Ş.	disclosed that are in the progress of assessing
HURGZ	HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.	✓
ICBCT	ICBC TURKEY BANK A.Ş.	✓
IEYHO	IŞIKLAR ENERJİ VE YAPI HOLDİNG A.Ş.	have not disclosed any information
IHLGM	İHLAS GAYRİMENKUL PROJE GELİŞTİRME VE TİCARET A.Ş.	disclosed that have not any affect
IHLAS	İHLAS HOLDİNG A.Ş.	disclosed that have not any affect
INDES	İNDEKS BİLGİSAYAR SİSTEMLERİ MÜHENDİSLİK SANAYİ VE TİCARET A.Ş.	disclosed that are in the progress of assessing
IPEKE	İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.	✓
ISDMR	İSKENDERUN DEMİR VE ÇELİK A.Ş.	✓
ISFIN	İŞ FİNANSAL KİRALAMA A.Ş.	✓
ISGYO	İŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	disclosed that the level of impact is insignificant
ITTFH	İTTİFAK HOLDİNG A.Ş.	✓
KRDMD	KARDEMİR KARABÜK DEMİR ÇELİK SANAYİ VE TİCARET A.Ş.	Disclosed that are in the progress of assessing
KARSN	KARSAN OTOMOTİV SANAYİİ VE TİCARET A.Ş.	disclosed that have not any affect
KARTN	KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.	✓

KERVT	KEREVİTAŞ GIDA SANAYİ VE TİCARET A.Ş.	✓
KCHOL	KOÇ HOLDİNG A.Ş.	✓
KORDS	KORDSA TEKNİK TEKSTİL A.Ş.	✓
KOZAL	KOZA ALTIN İŞLETMELERİ A.Ş.	✓
KOZAA	KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.	✓
MAVI	MAVİ GİYİM SANAYİ VE TİCARET A.Ş.	special reporting period other than ended 31 March
METRO	METRO TİCARİ VE MALİ YATIRIMLAR HOLDİNG A.Ş.	disclosed that are in the progress of assessing
MGROS	MİGROS TİCARET A.Ş.	✓
MPARK	MLP SAĞLIK HİZMETLERİ A.Ş.	disclosed that are in the progress of assessing
NTHOL	NET HOLDİNG A.Ş.	✓
NETAS	NETAŞ TELEKOMÜNİKASYON A.Ş.	✓
ODAS	ODAŞ ELEKTRİK ÜRETİM SANAYİ TİCARET A.Ş.	disclosed that are in the progress of assessing
OTKAR	OTOKAR OTOMOTİV VE SAVUNMA SANAYİ A.Ş.	✓
OZGYO	ÖZDERİCİ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	has not started to apply IFRS 16
PRKME	PARK ELEKTRİK ÜRETİM MADENCİLİK SANAYİ VE TİCARET A.Ş.	disclosed that the level of impact is insignificant
PARSN	PARSAN MAKİNA PARÇALARI SANAYİİ A.Ş.	disclosed that the level of impact is insignificant
PGSUS	PEGASUS HAVA TAŞIMACILIĞI A.Ş.	✓
PETKM	PETKİM PETROKİMYA HOLDİNG A.Ş.	✓
POLHO	POLİSAN HOLDİNG A.Ş.	✓
SASA	SASA POLYESTER SANAYİ A.Ş.	disclosed that the level of impact is insignificant
SODA	SODA SANAYİİ A.Ş.	✓
SKBNK	ŞEKERBANK T.A.Ş.	✓
SOKM	ŞOK MARKETLER TİCARET A.Ş.	✓
TATGD	TAT GIDA SANAYİ A.Ş.	✓
TAVHL	TAV HAVALİMANLARI HOLDİNG A.Ş.	✓
TKFEN	TEKFEN HOLDİNG A.Ş.	✓
TOASO	TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.	✓
TSPOR	TRABZONSPOR SPORTİF YATIRIM VE FUTBOL İŞLETMECİLİĞİ TİCARET A.Ş.	special reporting period other than ended 31 March

TRKCM	TRAKYA CAM SANAYİİ A.Ş.	✓
TCELL	TURKCELL İLETİŞİM HİZMETLERİ A.Ş.	adopted IFRS 16 early
TMSN	TÜMOSAN MOTOR VE TRAKTÖR SANAYİ A.Ş.	✓
TUPRS	TÜPRAŞ-TÜRKİYE PETROL RAFİNERİLERİ A.Ş.	✓
THYAO	TÜRK HAVA YOLLARI A.O.	✓
TTKOM	TÜRK TELEKOMÜNİKASYON A.Ş.	✓
TTRAK	TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.	✓
GARAN	TÜRKİYE GARANTİ BANKASI A.Ş.	✓
HALKB	TÜRKİYE HALK BANKASI A.Ş.	✓
ISCTR	TÜRKİYE İŞ BANKASI A.Ş.	✓
TSKB	TÜRKİYE SINAİ KALKINMA BANKASI A.Ş.	✓
SISE	TÜRKİYE ŞİŞE VE CAM FABRİKALARI A.Ş.	✓
VAKBN	TÜRKİYE VAKIFLAR BANKASI T.A.O.	✓
ULKER	ÜLKER BİSKÜVİ SANAYİ A.Ş.	disclosed that the level of impact is insignificant
VERUS	VERUSA HOLDİNG A.Ş.	have not disclosed any information
VESTL	VESTEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.	✓
YKBNK	YAPI VE KREDİ BANKASI A.Ş.	✓
YATAS	YATAŞ YATAK VE YORGAN SANAYİ VE TİCARET A.Ş.	✓
ZOREN	ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.	✓

From the BIST 100 Index companies of listed above, 52 non-financial which are real sector companies were included in the sample, however the others were excluded from the sample as shown detailed below. Due to application of new standard, the effect of transition on financial sector is analyzed separately, because insignificant impact is expected to the change in the assets of banks regarding total size of their assets. Besides, leasing companies were excluded because there is no material changes in lessor's accounting.

Table 9
Selection of Sample

BIST 100 Index Companies	
Number of total companies	100
Less number of banks and leasing companies	11
Less number of companies that disclosed the level of impact is insignificant for the first adoption of TFRS 16	10
Less number of companies that disclosed in the progress of assessing the impact of TFRS 16	9
Less number of companies that have special reporting period other than ended 31 March therefore financial statements have not published yet	5
Less number of companies that have not disclosed any information in their financial statements regarding initial application of TFRS 16	6
Less number of companies that have disclosed that have not any effect on financial statements for the first adoption	3
Less number of companies that adopted TFRS 16 early	1
Less number of company that has select retrospective approach for transition	1
Less number of companies that have declared to started new standard but have not made any disclosure about transition	1
Less number of company that has not started to apply TFRS 16	1
Final sample	**52**

Methodology

The key financial ratios that are selected in this study are EBITDA (Profitability), EPS (Earnings Per Share), Return on Equity (ROE), Debt to Equity (Leverage), Current Ratio (Liquidity), Asset Turnover (Profitability), Interest Cover (Long-term solvency). Therefore, the differences between financial ratios before and after adoption of TFRS 16 is analyzed and compared with previous year.

Formulas of ratios used in this study are given below:

-EBITDA: Profit before interest, tax, depreciation and amortization

-Earnings Per Share: Profit or loss / Number of shares in issue

-Return on Equity: Profit or loss/Equity

-Debt to Equity: Debt /Equity

-Current Ratio: Current Assets/Current Liabilities

-Asset Turnover: Sales / Total assets

-Interest Cover: EBITDA / Interest expense

In this study, the answers to following questions are seeking to given:

- Is the asset that have right to use are shown separately or with the related assets as a presentation preference?
- Which amount a right of use asset is recognized by companies?
- How many companies did choose to apply practical expedients and which expedients were selected?
- How many companies' disclosure are sufficient about the leases that classified as operational lease before?
- How many companies did make sufficient disclosure according to TFRS 16 disclosure requirements on notes to the financial statements as at 31 March 2019?
- Which transition method is chosen by companies for the first adoption of TFRS 16?
- Which sectors will be affected the most, as a result of the recognition of operational leases in the company's financial statements?
- Which extent the company's financial performance indicators are affected?

H0: There is a material effect of TFRS 16 on companies' financial ratios and financial performance.

H1: There is an insignificant effect of TFRS 16 on companies' financial ratios and financial performance.

4.4.Limitations of the Study

1. Financial reports are obtained from publicly listed companies in Turkey, registered on the BIST 100 Index.
2. 52 non-financial companies which are real sector companies were included in the sample, the others were excluded which are operated in financial sector because no significant impact is expected due to the size of total asset to the change in the lease accounting.
3. The companies that disclosed the level of impact was insignificant for the first adoption of TFRS 16 were not included in the study.
4. The companies that disclosed which are in the progress of assessing the impact of TFRS 16 were not included in the study.
5. The companies that have special reporting period other than ended 31 March therefore their financial statements have not published yet, so they are excluded from the sample.
6. The companies that have not disclosed any information in their financial statements regarding initial application of TFRS 16 are excluded from the sample.
7. Companies which have disclosed that have not any effect on financial statements for the first adoption is excluded.
8. The company that early adopters of TFRS 16 is excluded.
9. The company that have declared that started to apply new standard but have not made any disclosure about transition is excluded.
10. The company that has not started to apply TFRS 16 is excluded.
11. The company that has select retrospective approach for transition is excluded from sample.
12. It was accepted that the explanatory notes to the financial statements was made by taking into consideration the materiality, and the disclosures that has not made about others were not significant.
13. When the functional currency of the companies is different from TL, TL amounts are taken into account as presentation currency. Hence, any potential foreign currency effect is ignored.
14. The study is focused on the asset that have right to use by leasing in the total assets.
15. In the EBITDA calculation, companies' TFRS figures are used.

4.5.TFRS 16's Impact on Statements of Financial Position

46 of 52 companies prefer to present their right of use asset separately from other assets while 6 companies prefer to include their right of use asset into the related assets in their financial statements.

When the companies capitalized unrecorded leases, there is an increase TL 28,829,342,919 (2.59%) in the total assets and an increase TL 28,835,278,547 (3.75%) in total liabilities of the sample companies.

Table 10
Impact of Leases capitalization

	Reported @ 31 December 2018	After capitalization As of 1 January 2019	Difference	Portion %
Total Assets	1,112,946,165,569	1,141,775,508,488	28,829,342,919	2.59%
Total Liabilities	768,344,273,668	797,179,552,215	28,835,278,547	3.75%
Total Equity	344,601,891,901	344,601,891,901	-	-

4.6.TFRS 16's impact on Companies' Profit or Loss Table

According to TFRS 16, expenses are shown as finance expense and amortization expense in profit or loss table. As a result, the operating profit will be high level for companies that have huge amount off balance sheet leases compared to the amounts reported in previous year. The size of the increase in operating profit, and finance costs depends on the significance of leasing to the company, the length of its leases and the discount rates applied.[179]

In the first year of implementation of the new standard, interest expenses and consequently financing expense will be increased by taking operating leases into balance sheet. Depreciation expenses will continue linearly according to straight-line (linear) method.

12 companies presented separately their TFRS 16 impacts over financial statements. So, it can be seen TFRS 16 impact detail according to financial statements items. Table 11 shows TFRS 16's impact on companies' net income. Net income is changeable after TFRS 16 adoption. Particularly, companies which have huge amount of leases are affected mostly, especially retail sector.

[179] IASB, IFRS 16 Effect Analysis, page: 44.

Table 11
TFRS 16 Impact on Net Income as of 31 March 2019

	NET INCOME/LOSS FOR THE 1 January -31 March 2019		
Company code	**After TFRS 16**	**Before TFRS 16**	**Change %**
AKSA	64,246,000	64,556,000	(0.5)%
AEFES	(336,387,000)	(328,124,000)	2.5%
BIMAS	215,384,000	265,886,000	(19.0)%
ENJSA	297,419,000	301,212,000	(1.3)%
KARTN	25,381,338	25,433,189	(0.2)%
MGROS	(230,816,000)	(181,506,000)	27.2%
SODA	285,064,000	285,381,000	(0.1)%
SOKM	(97,477,440)	(72,552,578)	34.4%
TKFEN	780,905,000	782,375,000	(0.2)%
TRKCM	153,984,000	153,953,000	0.02%
SISE	625,798,000	627,522,000	(0.3)%
VESTL	(270,272,000)	(268,210,000)	0.8%

Table 12 shows the how the right of use asset depreciation effects the total depreciation expense as of 31 March 2019. For sample companies, depreciation expense increases 57.66 % as of 31 March 2019 compared to 31 March 2018 and 29.50 % of increase comes from right of use asset depreciation.

Table 12
Depreciation Expense Impact between 31 March 2019 and 31 March 2018

	A	B	C	D=C/B-1	E=C-A	F=E/B-1	D-F
Company code	**Right of use asset (ROU) depreciation**	**Depreciation expense @31 March 2018**	**Depreciation expense @31 March 2019**	**Change included ROU depreciation %**	**Without ROU Depreciation @31 March 2019**	**Change excluded ROU depreciation %**	**Difference result from ROU depreciation**
AFYON	255,958	7,320,448	7,581,201	3.56%	7,325,243	0.07%	3.50%
AKSA	546,000	22,104,000	27,725,000	25.43%	27,179,000	22.96%	2.47%
AKSEN	2,450,869	90,998,271	112,652,450	23.80%	110,201,581	21.10%	2.69%
ALARK	1,217,802	10,375,412	11,005,911	6.08%	9,788,109	-5.66%	11.74%
ANACM	2,635,000	78,245,000	97,538,000	24.66%	94,903,000	21.29%	3.37%
AEFES	17,254,000	238,062,000	450,261,000	89.14%	433,007,000	81.89%	7.25%
ARCLK	59,061,000	149,575,000	249,102,000	66.54%	190,041,000	27.05%	39.49%
BIMAS	150,747,000	77,517,000	251,664,000	224.66%	100,917,000	30.19%	194.47%
CLEBI	17,260,669	9,870,885	28,605,915	189.80%	11,345,246	14.94%	174.86%
DOHOL	18,624,000	164,718,000	68,468,000	-58.43%	49,844,000	-69.74%	11.31%
ECILC	2,752,000	3,107,000	5,352,000	72.26%	2,600,000	-16.32%	88.57%
ENJSA	14,251,000	61,434,000	83,853,000	36.49%	69,602,000	13.30%	23.20%
FROTO	10,761,000	128,162,000	178,053,000	38.93%	167,292,000	30.53%	8.40%
GLYHO	5,172,403	59,462,691	85,312,825	43.47%	80,140,422	34.77%	8.70%
GOODY	5,768,517	8,775,433	10,090,676	14.99%	4,322,159	-50.75%	65.73%
GSDHO	1,169,000	28,756,000	8,254,000	-71.30%	7,085,000	-75.36%	4.07%
SAHOL	78,375,000	192,439,000	334,362,000	73.75%	255,987,000	33.02%	40.73%
HURGZ	4,879,774	5,299,667	8,484,371	60.09%	3,604,597	-31.98%	92.08%
IPEKE	1,354,000	20,532,000	33,163,000	61.52%	31,809,000	54.92%	6.59%
KARTN	61,220	6,429,131	7,382,355	14.83%	7,321,135	13.87%	0.95%
KERVT	2,107,882	10,243,037	13,644,300	33.21%	11,536,418	12.63%	20.58%
KCHOL	79,260,000	446,431,000	643,715,000	44.19%	564,455,000	26.44%	17.75%
KORDS	1,109,213	29,383,575	43,362,371	47.57%	42,253,158	43.80%	3.77%

KOZAL	1,354,000	15,150,000	26,558,000	75.30%	25,204,000	66.36%	8.94%
KOZAA	1,354,000	20,361,000	30,681,000	50.69%	29,327,000	44.04%	6.65%
MGROS	44,560,000	69,585,000	209,214,000	200.66%	164,654,000	136.62%	64.04%
NTHOL	6,957,216	24,334,281	39,268,848	61.37%	32,311,632	32.78%	28.59%
NETAS	6,342,224	6,487,467	13,790,039	112.56%	7,447,815	14.80%	97.76%
OTKAR	2,201,000	15,161,000	17,421,000	14.91%	15,220,000	0.39%	14.52%
PGSUS	201,687,541	95,380,152	355,711,042	272.94%	154,023,501	61.48%	211.46%
POLHO	1,503,179	11,227,722	12,151,117	8.22%	10,647,938	-5.16%	13.39%
SODA	909,000	34,955,000	49,427,000	41.40%	48,518,000	38.80%	2.60%
SOKM	87,094,055	46,265,846	140,165,378	202.96%	53,071,323	14.71%	188.25%
TATGD	1,148,572	2,969,988	4,389,946	47.81%	3,241,374	9.14%	38.67%
TKFEN	5,650,000	43,154,000	64,438,000	49.32%	58,788,000	36.23%	13.09%
TOASO	1,089,000	188,456,000	216,551,000	14.91%	215,462,000	14.33%	0.58%
TRKCM	4,588,000	79,181,000	110,807,000	39.94%	106,219,000	34.15%	5.79%
TUPRS	7,667,000	155,462,000	171,048,000	10.03%	163,381,000	5.09%	4.93%
THYAO	413,000,000	1,025,000,000	1,923,000,000	87.61%	1,510,000,000	47.32%	40.29%
TTKOM	149,959,000	879,273,000	1,150,265,000	30.82%	1,000,306,000	13.77%	17.05%
SISE	18,502,000	249,680,000	311,325,000	24.69%	292,823,000	17.28%	7.41%
VESTL	11,852,000	105,593,000	148,012,000	40.17%	136,160,000	28.95%	11.22%
YATAS	7,874,222	5,562,829	6,978,749	25.45%	-895,473	-116.10%	141.55%
Total	**1,452,365,316**	**4,922,479,835**	**7,760,834,494**	**57.66%**	**6,308,469,178**	**28.16%**	**29.50%**

However, companies that do not have separately disclosed their depreciation expenses for its right of use asset as of 1 January 2019 are below:

Table 13
Companies That Do Not Have Separately Disclose the Depreciation Expense for its Right of Use Asset

Company Code	Company Name
DGKLB	DOĞTAŞ KELEBEK MOBİLYA SANAYİ VE TİCARET A.Ş.
EREGL	EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.
ISDMR	İSKENDERUN DEMİR VE ÇELİK A.Ş.
ITTFH	İTTİFAK HOLDİNG A.Ş.
PETKM	PETKİM PETROKİMYA HOLDİNG A.Ş.
TAVHL	TAV HAVALİMANLARI HOLDİNG A.Ş.
TMSN	TÜMOSAN MOTOR VE TRAKTÖR SANAYİ A.Ş.
TTRAK	TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.

ZOREN	ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.

Following 15 companies give information related to interest expense for their right of use asset as of 31 March 2019 in their financial reports while remaining 37 companies do not give information regarding this.

Table 14
Companies That Are Separately Disclose the Interest Expense for Its Right of Use Asset

Company Code	Company Name
AKSEN	AKSA ENERJİ ÜRETİM A.Ş.
ANACM	ANADOLU CAM SANAYİİ A.Ş.
BIMAS	BİM BİRLEŞİK MAĞAZALAR A.Ş.
CLEBI	ÇELEBİ HAVA SERVİSİ A.Ş.
ECILC	EİS ECZACIBAŞI İLAÇ, SINAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş.
GLYHO	GLOBAL YATIRIM HOLDİNG A.Ş.
GSDHO	GSD HOLDİNG A.Ş.
HURGZ	HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.
IPEKE	İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.
KARTN	KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.
KOZAL	KOZA ALTIN İŞLETMELERİ A.Ş.
KOZAA	KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.
NETAS	NETAŞ TELEKOMÜNİKASYON A.Ş.
TATGD	TAT GIDA SANAYİ A.Ş.
TTKOM	TÜRK TELEKOMÜNİKASYON A.Ş.

4.7. TFRS 16's Impact on Companies' Cash Flow Statements

As a result of the adoption of TFRS 16, there has been no change in the amount of cash flows' reported by the companies, but there is only a classification change in terms of presentation. Previously, operating leases are presented as cash outflows from operating activities, hereinafter it is classified as cash outflows from financing activities for cash and interest expenses so this increases the cash outflow from financing activities.

Table 15 shows the companies that present their cash outflows from payments of rent agreements as separate line "Cash Flows Financing Activities" in their cash flow statements.

Table 15
Companies That Has Present Separately Cash Outflows from Payments of Lease Agreements

Company Code	Cash outflows from payments of rent agreements @31 march 2019
AKSA	(2,212,000)
ANACM	(2,536,000)
AEFES	(15,358,000)
ARCLK	(60,360,000)
BIMAS	(234,472,000)
CLEBI	(20,912,322)
DOHOL	(17,397,000)
ECILC	(2,425,000)
ENJSA	(18,673,000)
FROTO	(11,334,000)
GLYHO	(8,558,104)
GSDHO	(663,000)
HURGZ	(1,164,298)
KCHOL	(109,946,000)
MGROS	(175,848,000)
OTKAR	(15,707,000)
PGSUS	(307,226,950)
PETKM	(8,505,000)
SODA	(502,000)
SOKM	(59,600,073)
TATGD	(1,426,342)
TAVHL	(3,765,000)
TOASO	(1,365,000)
TMSN	114,045
TUPRS	(23,200,000)
THYAO	112,000,000
TTKOM	(157,843,000)
SISE	(16,440,000)
VESTL	(17,652,000)
ZOREN	(5,121,000)

The following companies did not separately present the cash outflows arising from lease agreements as part of their cash flow statement.

Table 16
Companies That Have Not Present Separately Cash Outflows from Payments of Lease Agreements.

Company Code	Company Code
ITTFH	İTTİFAK HOLDİNG A.Ş.
KERVT	KEREVİTAŞ GIDA SANAYİ VE TİCARET A.Ş.
NETAS	NETAŞ TELEKOMÜNİKASYON A.Ş.
TKFEN	TEKFEN HOLDİNG A.Ş.
TRKCM	TRAKYA CAM SANAYİİ A.Ş.
YATAS	YATAŞ YATAK VE YORGAN SANAYİ VE TİCARET A.Ş.

The following companies did not provide any information regarding the cash outflows arising from the lease agreements.

Table 17
Companies That Have Not Provide Any Information about Cash Outflows From Payments of Lease Agreements

Company Code	Company Name
AFYON	AFYON ÇİMENTO SANAYİ T.A.Ş.
AKSEN	AKSA ENERJİ ÜRETİM A.Ş.
ALARK	ALARKO HOLDİNG A.Ş.
DGKLB	DOĞTAŞ KELEBEK MOBİLYA SANAYİ VE TİCARET A.Ş.
EREGL	EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.
GOODY	GOODYEAR LASTİKLERİ T.A.Ş.
SAHOL	HACI ÖMER SABANCI HOLDİNG A.Ş.
IPEKE	İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.
ISDMR	İSKENDERUN DEMİR VE ÇELİK A.Ş.
KARTN	KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.
KORDS	KORDSA TEKNİK TEKSTİL A.Ş.
KOZAL	KOZA ALTIN İŞLETMELERİ A.Ş.
KOZAA	KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.
NTHOL	NET HOLDİNG A.Ş.
POLHO	POLİSAN HOLDİNG A.Ş.
TTRAK	TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.

As shown below, both of the companies' cash outflows from financing activities' balances has increased compared to previous year.

Table 18
Cash Flow from Financing Activities-Example 1[180]

CASH FLOWS FROM/ (USED IN) FINANCING ACTIVITIES			
Proceeds From Loans	7	3.548	1.749
Payments of Loans		(1.613)	(901)
Payments of Finance Lease Liabilities	7	(1.214)	(910)
Payments of Lease Liabilities		112	-
Interest Paid		(264)	(187)
Other (Outflows)/ Inflows of Cash	8	(24)	(38)
Net Cash Used in Financing Activities		545	(287)
Net Change in Cash and Cash Equivalents		1.615	368
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD		8.606	7.132
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	5	10.221	7.500

Table 19
Cash Flows from Financing Activities-Example 2[181]

C. CASH FLOWS FROM FINANCING ACTIVITIES		**(271,951)**	**15,688**
Cash outlows from financial liabilities	6	**(37,853)**	**-**
Cash outflows from payments of rent agreements		**(234.472)**	**-**
Participation (profit) shares and cash inflows from other financial insturments		**374**	**15.688**

4.8.TFRS 16's Impact on Companies' Statements of Changes in Equity

The effect of leasing transactions on the statement of changes in equity depends on the change in net profit for the period.

As a result of the leasing transactions, the Company's statement of profit or loss will be subject to changes depending on the amount of rent expenses, recognized as depreciation

[180] Türk Hava Yollari Anonim Ortakliği And Its Subsidiaries Condensed Consolidated Interim Statement Of Cash Flows For The Three-Month Period Ended 31 March 2019
[181] Bim Birleşik Mağazalar A.Ş. Convenience Translation Into English Of Consolidated Financial Statements For The Period 1 January - 31 March 2019 (Originally Issued In Turkish)

and finance expenses so these could affect the statements of changes in equity.

52 companies which select simplified transition method, no restatement has been made in their comparative information of the financial statement and has not reported any impact on their retained earnings.

4.9. TFRS 16's Impact on Companies' Financial Ratios

Financial ratio analysis enables companies to make comparisons between certain periods or between other companies in the sector in which the company operates and to analyze their results. Ratio analysis allows companies to make effective and realistic comparisons.[182]

Ratios are generally divided into four categories:[183]

Table 20
Ratio Categorization

Liquidity	Profitability	Activity	Leverage
Measure short-term debt repayment	Shows how profitable the operations are	Measure efficiency of use of assets	Debt and equity portion in financing

In this thesis, the financial ratios that will be most affected by the standard change are selected.

IASB has published an Effect Analysis report regarding the expected effect of TFRS 16 on companies' financial performance. Table 18 shows the expected effects on some frequently used metrics when analyzing a company financial statements with material unrecognized operating leases.

Table 21
TFRS 16 Effects on Key Financial Metrics

Metric	What it measures	Common method of calculation	Expected effect of IFRS16	Explanation
Leverage	Long-term solvency	Liabilities/Equity	Increase	Increase because financial liabilities increase (and equity is expected to decrease)

[182] Gill, James O., Osgood, William R., Chatton, Moira, Understanding Financial Statements : Master the Tools That Help You Succeed, 2009, ebscohost, 12 May 2019
[183] Feldman, Matan, Libman, Arkady, Crash Course in Accounting and Financial Statement Analysis, 2007, ebscohost, 9 May 2019

Current Ratio	Liquidity	Current assets /Current liabilities	Decrease	Decrease because current lease liabilities increase while current assets do not
Asset Turnover	Profitability	Sales/ Total Assets	Decrease	Decrease because lease assets will be recognised as part of total assets
Interest cover	Long-term solvency	EBITDA/Interest expense	Depends	EBITDA will increase applying IFRS 16 as will interest expense. The change in the ratio will depend on the characteristics of the lease portfolio.
EBIT/ Operating Profit	Profitability	Various methods- Profit that does not consider earnings from investments and the effects of interest and taxes	Increase	Increase because expenses for off balance sheet leases are excluded.
EBITDA	Profitability	Profit before interest, tax, depreciation and amortisation	Increase	Increase because expenses for off balance sheet leases are excluded.

Resources: IASB Effect Analysis, IFRS 16

EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization)

EBITDA is one of the most frequently used metrics by companies that shows the financial performance of the companies. It is basically calculated as revenue deduct interest, taxes, and depreciation and amortization expenses. EBITDA is net income added with interest, tax, depreciation and amortization, and can be used to analyze and compare profitability between companies and other companies in the same sector, because it removes the effects of finance and accounting decisions.[184]

The basic formula of the EBITDA is:[185]

Net Income/Loss
+-Current Tax Income/Expense
+-Deferred Tax Income/Expense
+-Finance Income/Loss
+-Income/Loss related to investment activities
+-Depreciation Expense
EBITDA

There is an increase in EBITDA due to the fact that rent expenses are now classified

[184] Marcelo Bianconi a, Chih Ming Tan, Evaluating the instantaneous and medium-run impact of mergers and acquisitions on firm values, International Review of Economics and Finance 59 (2019) 71–87, Science direct, 12 May 2019
[185] FVAÖK (EBITDA) Faiz, Vergi, Amortisman Öncesi Kar'ın Hesaplanması, Finansal Tablo Analizi ve Şirket Değerlemede Kullanımı, Yrd. Doç Dr. Ali Atilla Perek, Dr. Çağrı Aksoy Hazır, 2016

as depreciation and interest expense rather than operating expense. This ratio increases for companies who have large amount of operational lease agreements before.

Companies which present their EBITDA according to TFRS 16 application in their financial statement or annual report are listed below:

Table 22
Capitalization Impact on EBITDA

Company Code	EBITDA Before Capitalization	EBITDA After Capitalization	Change %	Resource
AEFES	370,261,000	392,930,000	6 %	Financial Report
BIMAS	420,200,000	654,200,000	56 %	Annual Report
MGROS	313,807,000	489,655,000	56 %	Financial Report
SOKM	116,300,000	265,700,000	128 %	Financial Report

There are companies which do not present their EBITDA in their financial statements or annual report as listed below:

Table 23
Companies Do Not Present Their EBITDA

Company Code	Company
AFYON	AFYON ÇİMENTO SANAYİ T.A.Ş.
ALARK	AKSA ENERJİ ÜRETİM A.Ş.
CLEBI	ÇELEBİ HAVA SERVİSİ A.Ş.
ECILC	EİS ECZACIBAŞI İLAÇ, SINAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş.
GOODY	GOODYEAR LASTİKLERİ T.A.Ş.
GSDHO	GSD HOLDİNG A.Ş.
HURGZ	HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.
IPEKE	İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.
ITTFH	İTTİFAK HOLDİNG A.Ş.
KARTN	KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.
KCHOL	KOÇ HOLDİNG A.Ş.
KORDS	KORDSA TEKNİK TEKSTİL A.Ş.
KOZAL	KOZA ALTIN İŞLETMELERİ A.Ş.

KOZAA	KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.
OTKAR	OTOKAR OTOMOTİV VE SAVUNMA SANAYİ A.Ş.
PGSUS	PEGASUS HAVA TAŞIMACILIĞI A.Ş.
PETKM	PETKİM PETROKİMYA HOLDİNG A.Ş.
TATGD	TAT GIDA SANAYİ A.Ş.
TMSN	TÜMOSAN MOTOR VE TRAKTÖR SANAYİ A.Ş.
TTRAK	TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.
YATAS	YATAŞ YATAK VE YORGAN SANAYİ VE TİCARET A.Ş.

Anadolu Efes Biracılık ve Malt Sanayii A.Ş. also has presented TFRS 16 impact on EBITDA while it presenting the transition effect to TFRS 16 as below:

Table 24
Anadolu Efes Biracılık ve Malt Sanayii A.Ş. TFRS 16 Impact on EBITDA

	1 January- 31 March 2019		
	Without TFRS 16 effects	**TFRS 16 effects**	**With TFRS 16 effects**
Revenue	3.968.649	-	3.968.649
Cost of Sales (-)	(2.750.879)	347	(2.750.532)
GROSS PROFIT (LOSS)	**1.217.770**	**347**	**1.218.117**
General Adminstrative Expenses (-)	(375.784)	3.823	(317.961)
Sales, Distribution and Marketing Expenses (-)	(930.311)	1.239	(929.072)
Other Income from Operating Activities	139.557	-	139.557
Other Expenses from Operating Activities	(103.674)	-	(103.674)
PROFİT (LOSS) FROM OPERATING ACTIVITIES	**(52.442)**	**5.409**	**(47.033)**
Investment Activity Income	23.795	-	23.795
Investment Activity Expenses (-)	(35.142)	-	(35.142)
Income/(Loss) from Associates	(16.385)	(2.147)	(18.532)
PROFIT (LOSS) BEGORE FINANCING INCOME (EXPENSE)	**(80.174)**	**3.262**	**(76.912)**
Finance Income	222.173	2.897	225.070
Finance Expenses (-)	(418.469)	(12.535)	(431.004)
PROFIT (LOSS) FROM CONTINUING OPERATIONS	**(276.470)**	**(6.376)**	**(282.846)**
Tax (Expense) Income, Continuing Operations	**(51.654)**	**(1.887)**	**(53.541)**

-Current Period Tax (Expense) Income	(81.515)	-	(81.515)
-Deferred Tax (Expense) Income	*29.861*	(1.887)	*27.974*
PROFIT/ (LOSS)	**(328.124)**	**(8.263)**	**(336.387)**
Profit/(Loss) Attributable to			
-Non-Controlling Interest	*(157.580)*	*(2.056)*	*(159.636)*
-Owners of Parent	*(170.544)*	*(6.207)*	*(176.751)*
EBITDA	**370.261**	**22.669**	**392.930**

Also Bim Birleşik Mağazalar A.Ş has presented TFRS 16 impact on EBITDA in annual report as following:

Table 25
Bim Birleşik Mağazalar A.Ş TFRS 16 Impact on EBITDA

Condensed Consolidated (Million TL)	**1 January - 31 March**				
	2019 IFRS 16 included	**IFRS 16 Impact**	**2019 Excluding IFRS 16 impact**	**2018***	**Change (excluded IFRS 16 impact)**
Sales	**9.025**	**-**	**9.025**	6.97	**29,5%**
Gross Profit	**1.537**	**-**	**1.537**	1.22	**26,2%**
Gross Profit Margin %	*17,0*		*17,0*	*17,5*	
EBITDA	**654,2**	**(234,0)**	**420,2**	363,8	**15,5%**
EBITDA Margin %	*7,2*		*4,7*	*5,2*	
EBITDA	**402,5**	**(83,8)**	**318,7**	286,3	**11,3%**
EBIT Margin %	*4,5*		*3,5*	*4,1*	
Net Profit	**215,4**	**50,5**	**265,9**	234,3	**13,5%**
Net Profit Margin %	*2,4*		*2,9*	*3,4*	

Şok Marketler Ticaret A.Ş has presented TFRS 16 impact on EBITDA in financial statement as follows:

Table 26
Şok Marketler Ticaret A.Ş TFRS 16 Impact on EBITDA

	1 January -31 March 2019	TFRS 16 Impact	Before TFRS 16	1 January -31 March 2018
Loss from continued operations	**(97.477.440)**	**(24.924.862)**	**(72.552.578)**	**(120.088.974)**
Tax (Income) / expense	23.833.148	6.231.216	17.601.932	(2.140.719)
Profit/(Loss) Before Tax from continued operations	**(121.310.588)**	**(31.156.078)**	**(90.154.510)**	**(117.948.255)**
Finance expenses	(130.879.096)	(93.472.507)	(37.406.589)	(102.468.768)
Income /Expenses from investment activities (Net)	3.712.134	-	3.712.134	4.622.268
Amortization expense	(140.165.378)	(87.094.055)	(53.071.323)	(46.265.846)
EBITDA	**146.021.752**	**149.410.484**	**(3.388.732)**	**26.164.091**
Other Expense form Operating Profit	(119.727.221)	-	(119.727.221)	(63.538.010)
Adjusted EBITDA	**265.748.973**	**149.410.484**	**116.338.489**	**89.702.101**

Earnings per Share (EPS)

Measuring the share of net profit per share is the reason for the operation of the Company and which should be provided in order to provide a return to the shareholders. In addition, this ratio should be calculated separately for preferred and common shares.[186] The earnings per share is the rate that is calculated by dividing net income for ordinary shareholders to the weighted average number of ordinary shares held during the term. [187]

- Profit or loss
  Weighted average number of shares

EPS decreases in early years because liabilities decreases lower than assets. This can be seen as below for one company as an example. Coca Cola has applied TFRS 16 retrospectively. Its EPS has decreased in early years of adoption as follows.

[186] Mustafa Çanakçıoğlu, Dr. Cem Niyazi Durmuş, Nevzat Pamukçu, Halim Bursalı, Finansal Tablolar Analizi, 2016, page: 229
[187] Sherman, Eliot H.A, Manager's Guide to Financial Analysis : Powerful Tools for Analyzing the Numbers and Making the Best Decisions for Your Business,2015, ebscohost, 8 May 2019

Table 27
EPS Decreases in early years

Before IFRS 16 adoption				After IFRS 16 Adoption			
	Total Net Profit/Loss	**weighted average number of shares 2019**	**EPS**	**Total Net Profit/Loss**	**weighted average number of shares 2019**	**EPS**	**Change %**
31 December 2017	237,627,000	25,437,078,200	0.00934	236,067,000	25,437,078,200	0.00928	(0.7)
31 December 2018	326,778,000	25,437,078,200	0.0128	321,186,000	25,437,078,200	0.0126	(1.7)
31 March 2018	(45,991,000)	25,437,078,200	(0.0018)	(49,204,000)	25,437,078,200	(0.0019)	7.0
31 March 2019	-	-	-	(2,595,000)	25,437,078,200	(0.0001)	-

For 12 companies which present their profit or loss before and after TFRS 16, their EPS ratios has decreased after TFRS 16 adoption as below.

Table 28
TFRS 16 Impact on EPS as of 31 March 2019

Company code	EPS excluded TFRS 16	EPS included TFRS 16	Change %
AKSA	0.00349	0.00347	-0.48%
AEFES	-0.554	-0.568	-2.5%
BIMAS	0.887	0.718	-18.99%
ENJSA	0.003	0.003	-1.26%
KARTN	0.089	0.090	-0.20%
MGROS	-0.010	-0.013	-21.4%
SODA	0.285	0.285	-0.11%
SOKM	-0.119	-0.159	-25.6%
TKFEN	2.115	2.111	-0.19%
TRKCM	0.123	0.123	0.02%
SISE	2.789	2.781	-0.27%
VESTL	-0.080	-0.081	-0.8%

Return on Equity (ROE)

Return on Equity measures profit for each equity share.[188] It measures the rate of profit per unit of the capital provided to the entity by the owner or its partners. In general, after-tax profit is used as the tax cannot be used by the shareholders.[189] The higher level of this rate is to

[188] Feldman, Matan, Libman, Arkady, Crash Course in Accounting and Financial Statement Analysis, 2007, ebscohost, 9 May 2019
[189] Yrd. Doç. Dr. Mustafa Çanakçıoğlu, Dr. Cem Niyazi Durmuş, Nevzat Pamukçu, Halim Bursalı, Finansal Tablolar Analizi, 2016, page:225

be expected for companies.[190]

- Profit or loss
  Equity

As shown below, ROE ratio is analyzed for 12 companies which present their profit or loss before and after TFRS 16.

Table 29
TFRS 16 Impact on ROE as of 31 March 2019

Company code	ROE excluded TFRS 16	ROE included TFRS 16	Change %
AKSA	0.043	0.043	-0.48%
AEFES	-0.0146	-0.0149	-2.46%
BIMAS	0.071	0.058	-18.99%
ENJSA	0.049	0.049	-1.26%
KARTN	0.059	0.059	-0.20%
MGROS	-0.441	-0.561	-21.36%
SODA	0.059	0.059	-0.11%
SOKM	-0.433	-0.581	-25.57%
TKFEN	0.161	0.160	-0.19%
TRKCM	0.026	0.026	0.02%
SISE	0.037	0.037	-0.27%
VESTL	-0.085	-0.086	-0.76%

Debt to Equity

Debt to Equity ratio measure the relationship between the foreign sources obtained from the borrower and the capital of the company. Although this is not a definite rule, this ratio is seen to be 1 as the ideal level.[191] If the ratio is less than 1, the majority of the assets used in the business show that it is financed by equity, while the greater than 1 indicates that they have difficulty in paying their debts and interest.[192]

This ratio has increased due to capitalization of all leases. Because, liabilities are not recognized in balance sheet according to the previous standard. But, it is included in the balance

[190]Rama Gopal, CA. C., Financial Management: Text Cum Suggested Answers, 2008, page:64, Ebscohost
[191] Rama Gopal, CA. C., Financial Management: Text Cum Suggested Answers, 2008, page: 52, Ebscohost
[192] Mustafa Çanakçıoğlu, Dr. Cem Niyazi Durmuş, Nevzat Pamukçu, Halim Bursalı, Finansal Tablolar Analizi, 2016, page: 188

sheet with the new standard.

As shown below, Debt to Equity ratio has increased because of capitalization of lease liabilities.

Table 30
Capitalization Impact on Debt to Equity Ratio

Company code	D/E After Capitalization	D/E Before Capitalization	Change %
AFYON	1.875	1.842	1.8%
AKSA	1.903	1.894	0.5%
AKSEN	2.582	2.541	1.6%
ALARK	0.891	0.860	3.6%
ANACM	1.172	1.166	0.5%
AEFES	0.879	0.867	1.4%
ARCLK	2.542	2.451	3.7%
BIMAS	2.563	1.548	65.6%
CLEBI	5.078	3.311	53.4%
DOHOL	0.601	0.564	6.6%
DGKLB	(182.433)	(173.828)	-0.04%
ECILC	0.121	0.115	5.6%
ENJSA	2.693	2.671	0.8%
EREGL	0.435	0.428	1.6%
FROTO	2.422	2.386	1.5%
GLYHO	2.582	2.370	8.9%
GOODY	1.508	1.387	8.7%
GSDHO	0.445	0.437	1.9%
SAHOL	5.624	5.591	0.6%
HURGZ	0.394	0.366	7.8%
IPEKE	0.097	0.096	0.9%
ISDMR	0.345	0.334	3.2%
ITTFH	2.340	2.243	4.3%
KARTN	0.204	0.197	3.6%
KERVT	2.928	2.887	1.4%
KCHOL	1.694	1.668	1.6%
KORDS	1.074	1.065	0.9%
KOZAL	0.088	0.087	1.1%
KOZAA	0.094	0.093	1.0%
MGROS	20.643	16.139	27.9%
NTHOL	0.640	0.565	13.3%

NETAS	1.364	1.288	5.9%
OTKAR	4.957	4.911	0.9%
PGSUS	3.495	2.678	30.5%
PETKM	2.106	2.044	3.0%
POLHO	0.513	0.486	5.5%
SODA	0.315	0.308	2.1%
SOKM	17.408	11.403	52.7%
TATGD	0.765	0.726	5.4%
TAVHL	2.351	2.345	0.3%
TKFEN	1.732	1.720	0.7%
TOASO	2.512	2.508	0.2%
TRKCM	0.795	0.783	1.5%
TMSN	0.785	0.774	1.3%
TUPRS	3.045	3.025	0.7%
THYAO	2.760	2.487	11.0%
TTKOM	3.997	3.857	3.7%
TTRAK	3.798	3.745	1.4%
SISE	0.680	0.660	3.1%
VESTL	4.460	4.413	1.1%
YATAS	1.521	1.317	15.5%
ZOREN	6.259	6.245	0.2%

Current Ratio

Current ratio is a part of liquidity ratios. It shows the ability of the company to meet its short-term debts. As shown below, with the first implementation of TFRS 16, companies' current ratios decrease when compared to previous year. The short-term liabilities increased as a result of the liabilities for rental payments which were expensed previously, it led to a decreases in this ratio.

As shown below, 17 companies presented their current liabilities as of 1 January 2019, so current ratio is calculated for these companies. Current ratio has decreased because current lease liabilities increases where current assets do not change as a result of capitalization of leases.

Table 31
Capitalization impact on Current Ratio

Company code	Before capitalization	After capitalization	Change %
AFYON	0.281	0.281	0.000
ALARK	1.798	1.790	-0.004
ARCLK	1.536	1.511	-0.016
BIMAS	0.944	0.809	-0.143
ENJSA	0.849	0.841	-0.009
FROTO	1.024	1.020	-0.005
KARTN	4.001	0.314	-0.921
KERVT	2.328	2.280	-0.020
KCHOL	1.596	1.586	-0.006
KORDS	1.276	1.273	-0.002
MGROS	0.670	0.639	-0.047
OTKAR	2.076	2.058	-0.009
PGSUS	1.241	1.062	-0.144
PETKM	2.070	2.058	-0.006
SOKM	0.462	0.396	-0.144
TUPRS	1.314	1.312	-0.001
TTRAK	1.998	1.977	-0.011

Asset Turnover

Asset turnover ratio is a part of profitability ratios. Companies' asset turnover ratios decrease because of the increases of assets as a results of right of use asset taking into the financial statements according to TFRS 16 while sales are not much more volatile.

Table 32
Capitalization Impact on Asset Turnover Ratio as of 31 March 2019

	A	B	
Company Code	Asset Turnover Excluded ROU @31 March 2019	Asset Turnover Included ROU @31 March 2019	Change % A&B
AFYON	0.0402	0.0398	-1.1%
AKSA	0.2237	0.2229	-0.4%
AKSEN	0.1700	0.1682	-1.0%
ALARK	0.1272	0.1250	-1.7%
ANACM	0.1284	0.1279	-0.4%
AEFES	0.0928	0.0921	-0.7%

ARCLK	0.2228	0.2177	-2.3%
BIMAS	0.9832	0.7068	-28.1%
CLEBI	0.1884	0.1361	-27.8%
DOHOL	0.2611	0.2558	-2.0%
DGKLB	0.1985	0.1902	-4.2%
ECILC	0.0458	0.0456	-0.5%
ENJSA	0.1846	0.1836	-0.5%
EREGL	0.1588	0.1581	-0.4%
FROTO	0.6261	0.6208	-0.8%
GLYHO	0.0412	0.0388	-5.8%
GOODY	0.4313	0.4134	-4.2%
GSDHO	0.0127	0.0126	-0.5%
SAHOL	0.0106	0.0106	-0.5%
HURGZ	0.1111	0.1088	-2.1%
IPEKE	0.0944	0.0943	-0.1%
ISDMR	0.1785	0.1772	-0.7%
ITTFH	0.0634	0.0616	-2.9%
KARTN	0.3618	0.3599	-0.5%
KERVT	0.1983	0.1963	-1.0%
KCHOL	0.2376	0.2356	-0.8%
KORDS	0.2357	0.2348	-0.4%
KOZAL	0.0983	0.0983	-0.1%
KOZAA	0.0947	0.0947	-0.1%
MGROS	0.4569	0.3620	-20.8%
NTHOL	0.0235	0.0224	-4.6%
NETAS	0.0993	0.0968	-2.5%
OTKAR	0.1575	0.1566	-0.6%
PGSUS	0.1228	0.1044	-15.0%
PETKM	0.2219	0.2175	-2.0%
POLHO	0.1080	0.1059	-2.0%
SODA	0.1324	0.1319	-0.4%
SOKM	1.0248	0.7023	-31.5%
TATGD	0.3236	0.3168	-2.1%
TAVHL	0.0765	0.0764	-0.2%
TKFEN	0.3426	0.3414	-0.3%
TOASO	0.3129	0.3125	-0.1%
TRKCM	0.1274	0.1267	-0.5%
TMSN	0.1322	0.1315	-0.5%
TUPRS	0.3877	0.3863	-0.4%
THYAO	0.1235	0.1151	-6.8%
TTKOM	0.1377	0.1332	-3.3%
TTRAK	0.2481	0.2454	-1.1%
SISE	0.1205	0.1194	-0.9%

VESTL	0.2073	0.2055	-0.9%
YATAS	0.2976	0.2784	-6.4%
ZOREN	0.1103	0.1101	-0.2%

Interest Cover

This ratio shows the ability to cover the interest expenses with the profit obtained from the operations of the company.[193]

- EBITDA
  Interest Expense

EBITDA increases as a result of application of new standard. Interest cover ratio will depend on the interest expense as a result of types of lease agreements. As shown below, for companies that disclose their EBITDA, interest cover ratio has decreased while EBITDA and interest expense increases.

Table 33
Impact of Lease Capitalization on Interest Cover Ratio

Company Code	Before Capitalization	After Capitalization	Change %
AEFES	2.61	2.59	(1.0) %
BIMAS	47.70	4.24	(91.1) %
MGROS	2.81	2.25	(19.8)%
SOKM	9.76	2.52	(74.2)%

4.10. TFRS 16's impact on companies' notes to the financial statements

The effects of the TFRS 16 on the one of airline company's financial statements which is the most affected company is presented in the footnotes as follows:[194]

[193] Aydın Karapınar, Figen Ayıkoğlu Zaif, Finansal Analiz, Uluslararası Finansal Raporlama Standartları ile uyumlu 2012, 2.Baskı, Gazi Kitabevi.
[194] Türk Hava Yolları Anonim Ortaklığı And Its Subsidiaries, Condensed Consolidated Interim Financial Statements As at and For The Three-Month Period Ended 31 March 2019, convenience translation

Table 34
TFRS 16's Impact on Financial Statement of the Company-Example 1

Impact on the consolidated statement of financial position (increase/ (decrease)) as at 1 January 2019:

Property, plant and equipment (Right-of-use assets)	8.783
Prepaid expenses	(74)
Total Assets	**8.709**
Liabilities	
Lease Liabilities	8.567
Redelivery maintenance liabilities	166
Deferred tax liabilities	44
Total Liabilities	**8.777**
Net impact on equity	**(68)**

Another airline company has presented TFRS 16 impact on financial statement as below:

Table 35
TFRS 16's Impact on Financial Statement of the Company-Example 2[195]

	1 January 2019
Operational lease commitments	3.035.450.246
Short term and low value leases (-)	(1.185.154)
Total lease liability	3.034.265.092
Lease liability discounted with alternative borrowing rate (equivalent of TL)	**3.034.265.092**
-Short term lease liability	599.336.871
-Other short term provisions	37.324.568
-Long term lease liability	1.537.184.788
-Other long term provisions	860.418.865

[195] Pegasus Hava Taşımacılığı A.Ş and its subsidiaries, condensed consolidated financial statements for the three month interim period ended 31 March 2019

	31 March 2019	1 January 2019
Aircraft	2.481.866.425	2.481.866.425
Field Rental	26.675.304	26.675.304
Building	21.915.770	21.915.770
Other	1.617.0011	1.617.011
	2.532.074.510	**2.621.216.380**

	1 January 2019
Assets	
Right of use assets	2.621.216.380
Liabilities	
Lease Liabilities	(2.136.521.659)
Redelivery provisions	(897.743.433)
Deferred tax liabilities	82.609.742
Total Liabilities	**(2.951.655.350)**
Equity	**(330.438.970)**

One of the retail company that is the second most affected company shows its new standards effect over the financial statements as follows:[196]

Table 36
TFRS 16's Impact on Financial Statement of the Company-Example 3

Effects of TFRS 16	**31 March 2019**	**TFRS 16 impact**	**Before changes 31 March 2019**
Current Assets	**4.764.641**	**-**	**4.764.641**

[196] Bim Birleşik Mağazalar A.Ş. Convenience Translation Into English Of Consolidated Financial Statements For The Period 1 January - 31 March 2019 (Originally Issued In Turkish)

Cash and cash equivalents	**601.285**	**-**	**601.285**
Financial Investments	**320.170**	**-**	**320.170**
Trade receivables	**1.187.128**	**-**	**1.187.128**
- Trade receivables from third parties	**2.187.128**	-	**2.187.128**
Other receivables	**22.517**	-	**22.517**
- Other receivables from related parties	162	-	162
- Other receivables from third parties	22.355	-	22.355
Inventory	**2.277.727**	-	**2.277.727**
Prepaid expenses	**286.497**	-	**286.497**
Current income tax assets	**2.725**	-	**2.725**
Other current assets	**66.592**	-	**66.592**
Non-current assets	**8.004.198**	**3.589.933**	**4.414.265**
Financial investments	**481.706**	-	**481.706**
Other receivables	**8.295**	-	**8.295**
- Other receivables from third parties	8.295	-	8.295
Property, plant and equipment	**3.861.163**	-	**3.861.163**
Intangible assets	**38.517**	-	**38.517**
Right of use of assets	**3.589.056**	**3.589.056**	**-**
Prepaid expenses	**19.841**	-	**19,841**
Deferred tax assets	**5.620**	**877**	**4.743**
Total Assets	**12.768.839**	**3.589.933**	**9.178.906**

			31 March 2019
	31 March 2019	**TFRS 16 impact**	**Before changes**
Current Liabilities	**5.875.931**	**800.209**	**5.075.722**
Short term liabilities	**800.209**	**800.209**	**-**
- Short term borrowings	-	-	-
- Lease liabilities	800.209	800.209	-
Trade Payables	**4.704.080**	**-**	**4.704.080**
- Trade payables due to related parties	496.831	-	496.831
- Trade payables due to third parties	4.207.249	-	4.207.249

Other Payables	**155**	**-**	**155**
- Other payables due to third parties	155	-	155
Deferred revenue	**20.729**	**-**	**20.729**
Payables related to employee benefits	**97.631**	**-**	**97.631**
Short term provisions	**70.070**	**-**	**70.070**
- Provision for employee benefits	26.489	-	26.489
- Other short term provisions	43.581	-	43.581
Current income tax liabilities	**76.501**	**-**	**76.501**
Other current liabilities	**106.556**	**-**	**106.556**
Non-current liabilities	**3.152.180**	**2.840.453**	**311.727**
Long-term borrowings	**2.853.941**	**2.853.941**	**-**
- Lease liabilities	2.853.941	2.853.941	-
Long term provisions	**134.636**	**-**	**134.636**
- Provision for employee benefits	134.636	-	134.636
Deferred tax liabilities	**163.603**	**(13.488)**	**177.091**
Equity	**3.740.728**	**(50.729)**	**3.791.457**
Equity holders of the parent	**3.740.728**	**(50.729)**	**3.791.457**
Paid in share capital	**303.600**	**-**	**303.600**
Treasury shares	**(235.729)**	**-**	**(235.729)**
Other comprehensive income/(expense) not to be reclassified to profit or loss	**879.126**	**-**	**879.126**
- Property and equipment revaluation reserve	785.683	-	785.683
- Revaluation gain/(loss) on defined benefit plans	(90.164)	-	(90.164)
- Fair value changes in available for sale financial assets	183.607	-	183.607
Other comprehensive income/ (expense) to be reclassified to profit or loss	**54.353**	**(227)**	**54.580**
- Currency translation difference	54.353	(227)	54.580
Restricted reserves	**571.193**	**-**	**571.193**
Retained earnings	**1.952.801**	**-**	**1.952.801**
Net income for the period	**215.384**	**(50.502)**	**265.886**

Total Liabilities	**12.768.839**	**3.589.933**	**9.178.906**

	1 January- 31 March 2019	Impact of TFRS 16	1 January-31 March 2019 Before changes
PROFIT OR LOSS			
Revenue	9.025.282	-	9.025.282
Cost of sales (-)	(7.488.411)	-	(7.488.411)
GROSS PROFIT	**1.536.871**	**-**	**1.536.871**
Marketing expenses (-)	(977.377)	82.581	(1.059.892)
General administrative expenses (-)	(157.070)	1143	(158.213)
Other operating income	12.818	-	12.818
Other operating expense (-)	(3.743)	-	(3.743)
OPERATING PROFIT	**411.565**	**83.724**	**327.841**
Income from investing activities	20.272	-	20.272
Expense from investing activities	(99)	-	(99)
OPERATING PROFIT BEFORE FINANCIAL EXPENSES	**431.738**	**83.724**	**348.014**
Financial income	1.864	-	1.864
Financial expenses (-)	(154.144)	(148.591)	(5.553)
PROFIT BEFORE TAX FROM CONTINUED OPERATIONS	**279.458**	**(64.867)**	**344.325**
- Current tax expense	(78.711)	-	(78.711)
- Deferred tax expense	14.637	14.365	272
PROFIT FROM CONTINUED OPERATIONS	**215.384**	**(50.502)**	**265.886**
NET PROFIT	**215.384**	**(50.502)**	**265.886**

The carrying amount of each asset, the book value at the end of the reporting period and the additions to right of use assets during the period and the depreciation expenses related to these assets are shown in the sample note to the financial statements below.[197]

Table 37
Right of Use Asset's Detail on Financial Statement of the Company

Right of use

	Aircraft	Real Estate	Other	Total
Cost	-	-	-	-
Opening balance at 1 January 2019	579	2-0	2	601
Foreign currency translation differences	8.289	29-3	33	8.615
Additions				
Closing balance at 31 March 2019	8.868	313	35	9.216
Accumulated Depreciation				
Opening balance at 1 January 2019	-	-	-	-
Foreign currency translation differences	19	1	-	20
Depreciation charge	396	13	4	413
Closing balance at 31 March 2019	415	14	4	433
Net book value at 31 March 2019	8.453	299	31	8.783

4.11. TFRS 16's Impact According to Companies' Industry Sector

According to the International Financial Reporting Standard Effect Analysis report related to TFRS 16 possible effects was published in January 2016, it was stated that the sector that would be most affected by the capitalization of the operational lease agreements included in the notes to the in the balance sheet is airline sector. Other sectors after airline were estimated as retail, travel and leisure, transport, telecommunications, energy, media, distribution, information technologies and healthcare sectors, respectively.[198] One of the studies about the

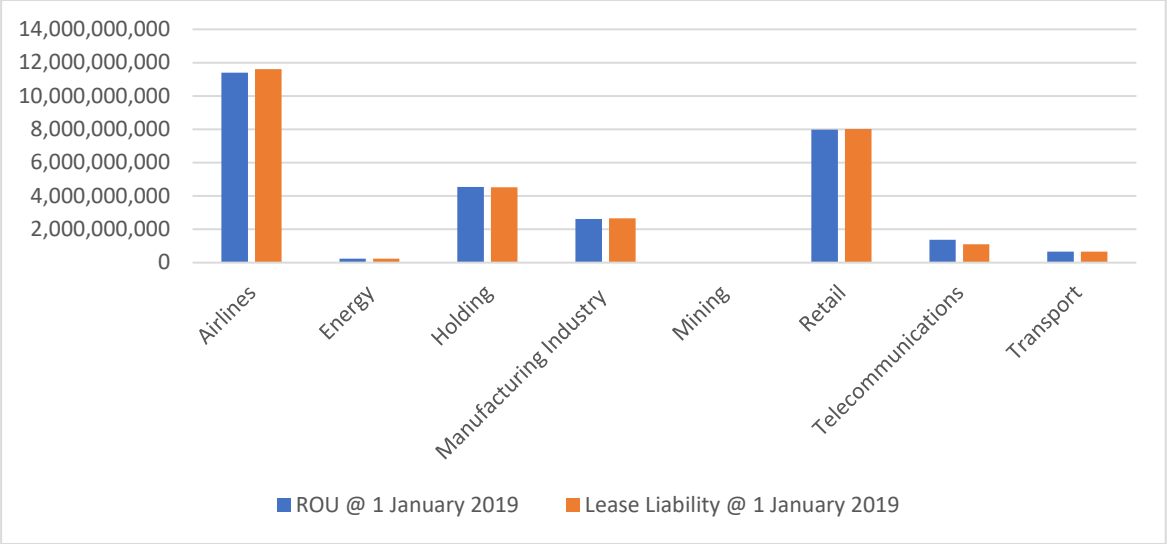
[197] Türk Hava Yolları Anonim Ortaklığı And Its Subsidiaries, Condensed Consolidated Interim Financial Statements As at and For The Three-Month Period Ended 31 March 2019
[198] IFRS, IFRS 16 Leases, Effect Analysis, January 2016, 30 March 2019, page: 16, https://www.ifrs.org/-/media/project/leases/ifrs/published-documents/ifrs16-effects-analysis.pdf

sector of capitalization of operating leases states that the retail, technology and energy sector will be the most affected sectors in their study.[199] Öztürk has also worked on the possible effects of TFRS 16 on companies. In his study, he analyzed the effects of TFRS 16 on 3 airlines for liquidity and financial structure. As a result, the financial structure of the companies with high volume of operating leases will increase and the liquidity will decrease.[200]

There are 52 real sector companies which TFRS 16 is applied on as of 31 March 2019 financial statements in BIST 100 Index.

As expected, companies such as airlines, retail, telecommunication were significantly influenced because of the amount of operating leases is more intensive in these sectors.

Figure 9: Capitalized ROU and Lease Liability on 1 January 2019



The amount of assets that have right to use and lease liability included in the financial statements as a result of the adoption of the new standard is presented below according to sector.

[199] Fitó, M. À., S. Moya ve N. Orgaz. 2013. "Considering the Effects of Operating Lease Capitalization on Key Financial Ratios", Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad, 42, 341-369, https://www.aeca.es/old/refc_1972-2013/2013/159-3.pdf

[200] Öztürk, C. 2016. "Ufrs 16 Kiralama İşlemlerİ Standardının Eskİ Ums 17 Standardı İle Karşılaştırılması ve Almanya ve Türkİye'de HİsseSenetleri Halka Açik Olan Hava Yolu Şİrketlerİnİn FİnansalDurumuna EtkİsİNİ", World of Accounting Science, 18,2016

Table 38
Right of Use Asset and Lease Liability sector distribution

Sector	Right of use asset	Lease Liability
Airlines	11,404,216,380	11,601,265,092
Retail	7,986,344,236	8,023,370,236
Holding	4,542,885,561	4,527,049,205
Manufacturing Industry	2,611,776,199	2,652,638,977
Telecommunications	1,379,678,627	1,111,482,627
Transport	653,583,578	663,873,072
Energy	239,173,338	243,914,338
Mining	11,685,000	11,685,000
Total	**28,829,342,919**	**28,835,278,547**

Table 39 shows the capitalization impact on total assets and total liabilities according to sector.

Table 39
Capitalization impact on sector

	Total Asset			Total Liabilities		
Sector	**Before capitalization**	**After capitalization**	**Change %**	**Before capitalization**	**After capitalization**	**Change %**
Airlines	122,740,887,536	134,145,103,916	9.29%	87,741,439,888	99,342,704,980	13.22%
Retail	23,959,052,647	31,945,396,883	33.33%	19,048,082,198	27,071,452,434	42.12%
Holding	558,074,492,428	562,617,377,989	0.81%	424,419,512,296	428,946,561,501	1.07%
Manufacturing Industry [201]	287,317,573,808	289,929,350,007	0.91%	154,184,819,724	156,837,458,701	1.72%
Telecom	38,059,950,117	39,439,628,744	3.63%	29,792,682,179	30,904,164,806	3.73%
Transport	22,326,341,041	22,979,924,619	2.93%	15,753,703,527	16,417,576,599	4.21%
Energy	46,727,042,992	46,966,216,330	0.51%	36,241,058,856	36,484,973,194	0.67%
Mining	13,740,825,000	13,752,510,000	0.09%	1,162,975,000	1,174,660,000	1.00%
Total	**1,112,946,165,569**	**1,141,775,508,488**	**2.59%**	**768,344,273,668**	**797,179,552,215**	**3.75%**

[201] Manufacturing industry mainly consists of fabricated metal products, chemicals, non-metallic mineral products and basic metal industries.

4.12. TFRS 16's impact on financial sector companies

There are 10 banks and 1 leasing company applying TFRS 16 in the BIST 100 Index. Application of new standard's transition effect on financial sector is analyzed separately, because insignificant impact is expected to the change in the assets of these companies regarding total size of their assets as shown below.

Table 40
Financial Sector Companies

Company Code	Company name	Type of company
AKBNK	AKBANK T.A.Ş.	Banks
ALBRK	ALBARAKA TÜRK KATILIM BANKASI A.Ş.	Banks
ICBCT	ICBC TURKEY BANK A.Ş.	Banks
SKBNK	ŞEKERBANK T.A.Ş.	Banks
GARAN	TÜRKİYE GARANTİ BANKASI A.Ş.	Banks
HALKB	TÜRKİYE HALK BANKASI A.Ş.	Banks
ISCTR	TÜRKİYE İŞ BANKASI A.Ş.	Banks
VAKBN	TÜRKİYE VAKIFLAR BANKASI T.A.O.	Banks
YKBNK	YAPI VE KREDİ BANKASI A.Ş.	Banks
ISFIN	İŞ FİNANSAL KİRALAMA A.Ş.	Leasing
TSKB	TÜRKİYE SINAİ KALKINMA BANKASI A.Ş.	Banks

Table 41
Capitalization Impact on Financial Sector Companies'

		Total Assets			Total Liabilities		
Company Code	Sector	Before capitalization	After capitalization	Change %	Before capitalization	After capitalization	Change %
AKBNK	Banks	354,681,610,000	355,492,627,000	0.23%	354,681,610,000	355,342,248,000	0.19%
ALBRK	Banks	42,221,947,000	42,508,071,000	0.68%	42,221,947,000	42,508,071,000	0.68%
ICBCT	Banks	15,852,490,000	15,931,612,000	0.50%	15,852,490,000	15,931,612,000	0.50%
SKBNK	Banks	31,321,320,000	31,520,758,000	0.64%	31,321,320,000	31,519,644,000	0.63%
GARAN	Banks	399,153,601,000	400,194,268,000	0.26%	399,153,601,000	400,194,268,000	0.26%
HALKB	Banks	388,221,676,000	388,897,977,000	0.17%	388,221,676,000	389,204,575,000	0.25%
ISCTR	Banks	499,907,357,000	508,094,524,000	1.64%	499,907,357,000	500,961,234,000	0.21%
VAKBN	Banks	344,638,460,000	345,433,272,000	0.23%	344,638,460,000	345,433,271,000	0.23%
YKBNK	Banks	373,376,254,000	374,222,555,000	0.23%	373,376,254,000	374,222,555,000	0.23%
Total		**2,449,374,715,000**	**2,462,295,664,000**	**0.53%**	**2,449,374,715,000**	**2,455,317,478,000**	**0.24%**

1 Bank and 1 Leasing Company have not provide any information regarding TFRS 16 impact.

Table 42
Financial Sector Companies' That Has Not Provide Any Information Regarding TFRS 16 Impact

Company Code	Company name	Sector
ISFIN	İŞ FİNANSAL KİRALAMA A.Ş.	Leasing
TSKB	TÜRKİYE SINAİ KALKINMA BANKASI A.Ş.	Banks

4.13. Findings and Results

The financial statements of the 100 publicly traded companies, which are publicly traded in the BIST 100 index, and their financial statements and related footnotes and explanatory information as at and for the year ended 31 Mach 2019 have been read and numeric data were analyzed. These financial statements were obtained from the KAP website. In addition, the annual reports were also reviewed in order to reach EBITDA information from KAP.

As of 31 March 2019, the list of companies that are listed in the BIST 100 index and whether they apply TFRS 16 or not, is included in the list including the sectors of those companies. There are 10 banks and 1 leasing company applying TFRS 16 in the BIST 100 Index. Application of new standard's transition effect on financial sector is analyzed separately, because insignificant impact is expected to the change in the assets of these companies regarding total size of their assets.

As a result of the examination, it was observed that 52 real sector companies in the BIST 100 index applied TFRS 16 selecting modified retrospective approach-practical expedients for operational lease for transition in their financial statements as of 31 March 2019. New standard has been adopted early solely by one listed company as of 1 January 2018. Another one company select retrospective method to apply the new standard, so it has restated its previous year financial statements.

When the sector distributions of these companies are detailed; 24 companies are

operated in manufacturing, 12 companies are holding, 4 companies are operated in retail sector, 3 companies are operated in energy, 3 companies are operated in mining, 2 companies are airline, 2 companies are telecommunication and 2 companies are transport sector. Manufacturing industry mainly consists of fabricated metal products, chemicals and non-metallic mineral products.

46 of 52 companies present separately its right of use asset from other asset while remaining 6 companies present their right of use asset included the related assets in their financial statements.

As expected, companies such as airlines, retail, travel, telecommunication, transportation and high amount of operating leases were significantly influenced by this change in accounting policy because of the amount of operating leases is more intensive in these sectors (for example Bim, Migros, Turkish Airlines etc.)

12 companies has not disclose any information about whether practical expedients are selected or not despite having a lease. 40 companies have disclosed information about the selection preferences of practical expedients both low-value assets and short-term leases.

As of 31 March 2019, for 52 sample companies have recognized the right of use asset amounting TL 28,829,342,919 and lease liabilities amounting TL 28,835,278,547 as of 1 January 2019. These amount constitutes 2.59% and 3.75% of total assets and total liabilities of companies as of 31 December 2018, respectively.

Both cash and interest expenses so this increases the cash outflow from financing activities because of the changes in presentation according to TFRS 16.

EBITDA has increased because of recognition of operating leases, all payments made for operating leases are considered as rent expenses in the context of operating expenses, as these expenses have recognized in the financial statements as interest and depreciation after TFRS 16, so rental payments are no longer taken into account in EBITDA calculation.

Earnings per share ratio has decreased because liabilities decreases lower than assets. Also Return on Equity is changeable because it depends on profit or loss.

Debt to Equity ratio has increased because of capitalization of lease liabilities. So companies are shown more indebted.

Current ratio has decreased because current lease liabilities increase where current assets do not change as a result of capitalization of leases.

Companies' asset turnover ratios decrease because of the increases of assets as a results of right of use asset taking into the financial statements according to TFRS 16 while sales are not much more volatile.

Interest cover rate has decreased while EBITDA AND interest expense increases.

Sector distribution of companies' adoption to TFRS 16 are manufacturing industry, holdings, airlines, retail, telecommunications, transport and energy.

The most effected sectors which has the huge amount of right of use asset in their statements of financial position are airlines, retail, holdings, manufacturing industry and telecommunications.

CONCLUSION

Lease transactions are frequently preferred by companies as an alternative financing method. In this respect, leases are a form of financing that is purchased by another entity instead of purchasing an asset by the investor and leasing that property to the investor for a certain period.

TAS 17 Leases contains similar provisions as the current tax legislation in our country and classifies the leases to finance and operating lease. As the assets categorized as finance leases are included in the statement of financial position of the companies, assets and liabilities related to operating lease agreements are excluded from the balance sheet since the assets under operational leases are considered as off-balance sheet assets. Therefore, the biggest concern of TAS 17 is that most of the liabilities are not recognized in the financial statements of the tenant. Therefore, most of the companies carry the much more risk than the balance sheet.

As a result of the project carried out in order to provide a more transparent reporting on the accounting of leases, the IASB issued the IFRS 16 on January 2016 effective from 1 January 2019. In our country, in April 2018, the TFRS 16 Leases Standard was published in a manner that consistent with the same effective date. Thus, with the new standard, lessees will have to account for almost all lease agreements as liabilities for use in statement of financial position, as well as the related lease obligations as liabilities under the right to use model. With TFRS 16, a significant portion of the leases will be presented in the statement of financial position. Thus, the assets and liabilities reported by the companies that continue their activities through the leases will increase.

In the fourth part of the study, 52 companies are analyzed which are selected among the companies (BIST 100). The analysis is performed by examining the financial statements and the related footnotes and explanatory information of the 100 publicly traded companies in the BIST 100 index as of 31 March 2019. Financial statements and annual reports for this thesis is get from KAP (Public Disclosure Platform) website. Interim consolidated and unconsolidated financial statements as at 31 March 2019 are downloaded for each company and make a copy of these excel sheets for analyses. The population consists of companies that are listed on BIST

100 Index included of 100 firms for 2019. The companies' application of TFRS 16 were examined considering theoretical information.

In our country, 2016 TAS Taxonomy was updated in April 2019 within the framework of TFRS 15 *"Revenue from Contracts with Customer"* and TFRS 16 *"Leases"* Standards, and was republished by the POA in 2019 with the name of TFRS Taxonomy in order to provide the term unity in the legislation. As a result of this regulation in terms of TFRS 16, the right of use assets and lease liabilities has been added as line to statement of financial position. Cash outflows from payments of rent agreements has been added to as a line to under cash flows from financing activities to cash flow statements to updated TFRS Taxonomy.

Consequently, it is beneficial to present the all leased assets as asset that have right to use in the statement of financial position and the present the all lease liabilities is useful for financial statement users. The inadequacy of footnote disclosures was also corrected. More useful data can be obtained for analyzes and company valuations.

The expectations foreseen in those study were examined in our thesis. When the results has compared to expectations, similar results have been achieved and the most affected sectors are airline and retail companies are more indebted, and their leverage (debt to equity) has increased.

Expected new standards impacts are foreseen by IASB and various studies and the possible impacts have been analyzed. Basic expectations are all leases will appear on the statement of financial position of the companies, increasing the assets and liabilities of lessees.

APPENDIX

Appendix 1: Companies' information from financial report

Company code	ROU @ 1 January 2019	Lease Liability @ 1 January 2019	Total Assets @ 31 December 2018	Total Liabilities @31 December 2018
AFYON	7,758,377	7,758,377	661,360,896	428,646,813
AKSA	13,600,000	13,600,000	4,188,627,000	2,741,145,000
AKSEN	73,114,338	73,114,338	6,438,141,992	4,620,189,856
ALARK	49,997,922	49,997,922	3,012,248,675	1,392,626,551
ANACM	13,991,000	13,991,000	5,001,782,000	2,692,320,000
AEFES	254,877,000	254,877,000	39,448,932,000	18,320,843,000
ARCLK	743,980,000	743,980,000	28,368,361,000	20,149,199,000
BIMAS	3,564,459,000	3,564,459,000	8,947,950,000	5,435,934,000
CLEBI	613,668,578	623,958,072	1,522,060,041	1,168,972,527
DOHOL	261,483,000	261,483,000	10,949,810,000	3,947,919,000
DGKLB	31,736,606	31,736,014	637,382,545	641,070,505
ECILC	25,554,000	25,554,000	4,456,472,000	458,628,000
ENJSA	132,383,000	137,124,000	23,125,041,000	16,826,126,000
EREGL	195,133,000	195,133,000	41,782,110,000	12,527,485,000
FROTO	137,028,000	139,106,000	13,184,440,000	9,291,201,000
GLYHO	355,325,965	355,325,965	5,647,992,234	3,972,109,985
GOODY	79,139,316	79,139,316	1,565,717,100	909,834,126
GSDHO	11,004,000	11,004,000	1,906,464,000	579,311,000
SAHOL	1,895,679,000	1,895,679,000	371,686,271,000	315,290,475,000
HURGZ	18,202,666	18,202,666	874,168,650	234,005,091
IPEKE	3,895,000	3,895,000	4,716,616,000	414,495,000
ISDMR	167,767,000	167,767,000	20,981,564,000	5,253,796,000
ITTFH	61,264,306	61,264,306	2,045,127,331	1,414,445,625
KARTN	2,816,119	2,867,970	487,898,980	80,176,982
KERVT	33,562,362	31,459,002	3,039,834,081	2,257,852,636
KCHOL	1,220,541,000	1,220,541,000	125,275,881,000	78,317,471,000
KORDS	20,471,019	21,816,227	4,830,186,517	2,491,272,549
KOZAL	3,895,000	3,895,000	4,336,220,000	348,544,000
KOZAA	3,895,000	3,895,000	4,687,989,000	399,936,000
MGROS	2,823,261,000	2,860,287,000	10,884,861,000	10,249,771,000
NTHOL	300,113,226	300,113,226	6,251,935,888	2,256,789,253
NETAS	61,771,627	61,771,627	1,861,439,117	1,047,774,179
OTKAR	17,855,000	17,855,000	2,302,746,000	1,913,160,000
PGSUS	2,621,216,380	3,034,265,092	13,664,887,536	9,949,439,888
PETKM	266,133,000	255,213,000	12,587,806,000	8,452,870,000

POLHO	44,788,142	39,871,786	2,218,964,300	725,741,882
SODA	28,763,000	31,940,000	6,369,058,000	1,499,863,000
SOKM	1,579,131,791	1,579,131,791	3,261,931,527	2,998,942,504
TATGD	19,492,445	19,492,445	864,310,120	363,434,694
TAVHL	39,915,000	39,915,000	20,804,281,000	14,584,731,000
TKFEN	51,002,000	51,002,000	12,035,520,000	7,611,125,000
TOASO	14,995,000	14,995,000	13,001,799,000	9,295,244,000
TRKCM	62,783,000	68,162,000	10,312,781,000	4,528,808,000
TMSN	3,756,367	4,086,954	709,574,868	309,666,081
TUPRS	198,739,000	198,739,000	40,035,727,000	30,089,898,000
THYAO	8,783,000,000	8,567,000,000	109,076,000,000	77,792,000,000
TTKOM	1,317,907,000	1,049,711,000	36,198,511,000	28,744,908,000
TTRAK	35,729,307	34,524,391	3,093,253,588	2,441,395,866
SISE	311,366,000	340,599,000	27,767,556,000	11,040,782,000
VESTL	154,829,000	157,406,000	17,960,822,000	14,642,567,000
YATAS	62,898,060	62,898,060	711,891,583	404,588,075
ZOREN	33,676,000	33,676,000	17,163,860,000	14,794,743,000
Total	**28,829,342,919**	**28,835,278,547**	**1,112,946,165,569**	**768,344,273,668**

Company Code	Total Liabilities @31 December 2018	Sales @31 March 2019	Total Assets @ 31 March 2019	ROU @ 31 March 2019
AFYON	232,714,083	26,718,177	671,877,675	7,502,419
AKSA	1,447,482,000	925,425,000	4,152,115,000	15,727,000
AKSEN	1,817,952,136	1,155,422,198	6,868,434,588	70,562,616
ALARK	1,619,622,124	364,837,718	2,918,143,019	49,255,436
ANACM	2,309,462,000	775,323,000	6,061,894,000	24,727,000
AEFES	21,128,089,000	3,968,649,000	43,088,473,000	308,826,000
ARCLK	8,219,162,000	6,902,157,000	31,707,316,000	728,827,000
BIMAS	3,512,016,000	9,025,282,000	12,768,839,000	3,589,056,000
CLEBI	353,087,514	310,950,666	2,285,360,311	634,572,681
DOHOL	7,001,891,000	3,056,854,000	11,951,145,000	242,859,000
DGKLB	-3,687,960	134,523,783	707,378,029	29,826,014
ECILC	3,997,844,000	208,272,000	4,565,812,000	22,802,000
ENJSA	6,298,915,000	4,483,636,000	24,421,116,000	132,383,000
EREGL	29,254,625,000	7,144,139,000	45,175,887,000	195,133,000
FROTO	3,893,239,000	9,284,052,000	14,954,649,000	126,267,000
GLYHO	1,675,882,249	246,661,444	6,356,642,788	365,519,628
GOODY	655,882,974	730,346,029	1,766,590,337	73,370,799
GSDHO	1,327,153,000	26,123,000	2,067,354,000	10,459,000
SAHOL	56,395,796,000	4,288,335,000	405,287,859,000	1,932,748,000
HURGZ	640,163,559	94,417,068	868,181,058	18,202,666
IPEKE	4,302,121,000	486,532,000	5,158,160,000	3,895,000

ISDMR	15,727,768,000	4,059,974,000	22,912,656,000	167,767,000
ITTFH	630,681,706	130,938,668	2,126,058,854	61,264,306
KARTN	407,721,998	187,463,438	520,930,856	2,816,119
KERVT	781,981,445	612,606,904	3,121,241,322	31,454,480
KCHOL	46,958,410,000	34,095,399,000	144,711,996,000	1,203,977,000
KORDS	2,338,913,968	1,265,140,511	5,388,368,937	20,678,957
KOZAL	3,987,676,000	467,841,000	4,761,342,000	3,895,000
KOZAA	4,288,053,000	485,753,000	5,131,828,000	3,895,000
MGROS	635,090,000	4,922,670,000	13,598,148,000	2,823,261,000
NTHOL	3,995,146,635	145,332,389	6,491,972,865	300,113,226
NETAS	813,664,938	219,414,265	2,266,104,090	55,784,818
OTKAR	389,586,000	419,070,000	2,676,479,000	15,583,000
PGSUS	3,715,447,648	1,765,904,482	16,911,618,784	2,532,074,510
PETKM	4,134,936,000	2,832,087,000	13,021,900,000	258,043,000
POLHO	1,493,222,418	234,074,201	2,210,428,791	43,346,684
SODA	4,869,195,000	947,994,000	7,186,290,000	28,763,000
SOKM	262,989,023	3,523,401,544	5,017,214,584	1,579,131,791
TATGD	500,875,426	278,643,826	879,535,782	18,343,873
TAVHL	6,219,550,000	1,619,761,000	21,202,423,000	39,915,000
TKFEN	4,424,395,000	4,587,478,000	13,435,368,000	46,425,000
TOASO	3,706,555,000	3,981,450,000	12,739,396,000	13,906,000
TRKCM	5,783,973,000	1,534,352,000	12,113,553,000	65,296,000
TMSN	399,908,787	96,293,377	732,317,298	3,672,893
TUPRS	9,945,829,000	20,707,888,000	53,606,037,000	197,898,000
THYAO	31,284,000,000	14,848,000,000	129,054,000,000	8,783,000,000
TTKOM	7,453,603,000	5,403,252,000	40,573,449,000	1,337,505,000
TTRAK	651,857,722	817,964,375	3,332,530,391	35,840,582
SISE	16,726,774,000	3,922,827,000	32,868,098,000	311,366,000
VESTL	3,318,255,000	3,562,533,000	17,338,267,000	154,829,000
YATAS	307,303,508	237,744,028	853,942,128	55,023,838
ZOREN	2,369,117,000	1,870,843,000	16,987,456,000	30,835,000
Total	**344,601,891,901**	**173,422,750,091**	**1,247,574,177,487**	**28,808,226,336**

Company code	Total Liabilities @31 December	Lease liability @1 March 2019	Equity @31 December
AFYON	428,646,813	7,758,377	232,714,083
AKSA	2,741,145,000	13,600,000	1,447,482,000
AKSEN	4,620,189,856	73,114,338	1,817,952,136
ALARK	1,392,626,551	49,997,922	1,619,622,124
ANACM	2,692,320,000	13,991,000	2,309,462,000
AEFES	18,320,843,000	254,877,000	21,128,089,000
ARCLK	20,149,199,000	743,980,000	8,219,162,000
BIMAS	5,435,934,000	3,564,459,000	3,512,016,000
CLEBI	1,168,972,527	623,958,072	353,087,514
DOHOL	3,947,919,000	261,483,000	7,001,891,000
DGKLB	641,070,505	31,736,014	-3,687,960
ECILC	458,628,000	25,554,000	3,997,844,000
ENJSA	16,826,126,000	137,124,000	6,298,915,000
EREGL	12,527,485,000	195,133,000	29,254,625,000
FROTO	9,291,201,000	139,106,000	3,893,239,000
GLYHO	3,972,109,985	355,325,965	1,675,882,249
GOODY	909,834,126	79,139,316	655,882,974
GSDHO	579,311,000	11,004,000	1,327,153,000
SAHOL	315,290,475,000	1,895,679,000	56,395,796,000
HURGZ	234,005,091	18,202,666	640,163,559
IPEKE	414,495,000	3,895,000	4,302,121,000
ISDMR	5,253,796,000	167,767,000	15,727,768,000
ITTFH	1,414,445,625	61,264,306	630,681,706
KARTN	80,176,982	2,867,970	407,721,998
KERVT	2,257,852,636	31,459,002	781,981,445
KCHOL	78,317,471,000	1,220,541,000	46,958,410,000
KORDS	2,491,272,549	21,816,227	2,338,913,968
KOZAL	348,544,000	3,895,000	3,987,676,000
KOZAA	399,936,000	3,895,000	4,288,053,000
MGROS	10,249,771,000	2,860,287,000	635,090,000
NTHOL	2,256,789,253	300,113,226	3,995,146,635
NETAS	1,047,774,179	61,771,627	813,664,938
OTKAR	1,913,160,000	17,855,000	389,586,000
PGSUS	9,949,439,888	3,034,265,092	3,715,447,648
PETKM	8,452,870,000	255,213,000	4,134,936,000
POLHO	725,741,882	39,871,786	1,493,222,418
SODA	1,499,863,000	31,940,000	4,869,195,000
SOKM	2,998,942,504	1,579,131,791	262,989,023
TATGD	363,434,694	19,492,445	500,875,426
TAVHL	14,584,731,000	39,915,000	6,219,550,000
TKFEN	7,611,125,000	51,002,000	4,424,395,000

TOASO	9,295,244,000	14,995,000	3,706,555,000
TRKCM	4,528,808,000	68,162,000	5,783,973,000
TMSN	309,666,081	4,086,954	399,908,787
TUPRS	30,089,898,000	198,739,000	9,945,829,000
THYAO	77,792,000,000	8,567,000,000	31,284,000,000
TTKOM	28,744,908,000	1,049,711,000	7,453,603,000
TTRAK	2,441,395,866	34,524,391	651,857,722
SISE	11,040,782,000	340,599,000	16,726,774,000
VESTL	14,642,567,000	157,406,000	3,318,255,000
YATAS	404,588,075	62,898,060	307,303,508
ZOREN	14,794,743,000	33,676,000	2,369,117,000
Total	**768,344,273,668**	**28,835,278,547**	**344,601,891,901**

Company code	**Net ıncome After TFRS 16**	**Net Income Before TFRS 16**	**number of share**	**Equity @31 March 2019**
AKSA	64,246,000	64,556,000	18,500,000,000	1,508,645,000
AEFES	(336,387,000)	(328,124,000)	592,105,263	22,453,053,000
BIMAS	215,384,000	265,886,000	299,782,000	3,740,728,000
ENJSA	297,419,000	301,212,000	118,106,896,712	6,129,912,000
KARTN	25,433,189	25,381,338	283,701,421	432,493,554
MGROS	(230,816,000)	(181,506,000)	18,105,400,000	411,315,000
SODA	285,064,000	285,381,000	1,000,000,000	4,859,223,000
SOKM	(97,477,440)	(72,552,578)	611,928,571	167,643,474
TKFEN	780,905,000	782,375,000	370,000,000	4,874,221,000
TRKCM	153,984,000	153,953,000	1,250,000,000	6,026,202,000
SISE	625,798,000	627,522,000	225,000,000	17,109,666,000
VESTL	(270,272,000)	(268,210,000)	3,354,600,000	3,150,480,000

Company code	**Current Assets @31 December 2018**	**Current Liabilities @31 December 2018**	**Current Lease Liability @ 1 January 2019**
AFYON	86,051,834	306,179,373	0
ALARK	1,567,248,971	871,604,315	3,850,175
ARCLK	19,196,026,000	12,496,956,000	209,102,000
BIMAS	4,842,262,000	5,131,245,000	854,573,000
ENJSA	6,404,415,000	7,544,138,000	70,297,000
FROTO	7,395,461,000	7,219,612,000	33,370,000
KARTN	269,609,661	67,379,322	790,515,000

KERVT	1,857,985,221	798,175,008	16,619,528
KCHOL	64,765,742,000	40,578,455,000	261,089,000
KORDS	2,148,514,481	1,683,695,286	3,966,252
MGROS	4,474,261,000	6,674,919,000	329,528,000
OTKAR	1,802,481,000	868,140,000	7,647,000
PGSUS	4,412,080,391	3,554,371,119	599,336,871
PETKM	7,994,968,000	3,862,111,000	23,287,000
SOKM	1,315,334,721	2,845,118,009	480,110,749
TUPRS	20,962,205,000	15,949,538,000	23,629,000
TTRAK	2,162,519,652	1,082,294,860	11,786,723

Company Code	**Before TFRS 16**	**After TFRS 16**	**Interest expense excluded TFRS 16 impact**	**Interest expense included TFRS 16 impact**
AEFES	370,261,000	392,930,000	141,674,000	151,905,000
BIMAS	420,200,000	654,200,000	8,810,000	154,144,000
MGROS	313,807,000	489,655,000	111,793,000	217,522,000
SOKM	116,300,000	265,700,000	11,918,318	105,390,825

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